EEC ENVIRONMENTAL INC.

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☐ Southwest Region
1100 Alvarado Drive, N.E.
Albuquerque, NM 87110
(505) 255-7096

April 9, 1991

Mr. Stefan D. Sedlack
New Jersey Department of Environmental Protection (NJDEP)
Division of Water Resources
Metro Bureau of Regional Enforcement
2 Babcock Place
West Orange, NJ 07052

Subject: New Jersey Department of Environmental Protection (NJDEP)
Bureau of Underground Storage Tanks (BUST)
September 1990 Scope of Work (SOW) Compliance Activities
Dumont Department of Public Works (DDPW) Property
1 Aladdin Avenue
Dumont, New Jersey

Dear Mr. Sedlack:

In accordance with your request, this letter confirms our telephone conversation regarding the status of the NJDEP-BUST SOW compliance activities at the subject property.

As we discussed, submittal of the Discharge Investigation Corrective Action Report (DICAR) will be delayed because the results of the investigative activities completed to date indicate that the UST that was the subject of the completed investigation is the not the source of the observed conditions that initiated the investigation. As you will recall, the investigation began when product that appeared to be gasoline was observed seeping from a bank between the DDPW garage property and the adjacent property following an extended period of heavy rainfall. The UST that was the subject of this investigation was removed immediately after the seepage was observed and was thought to be the source of the observed product.

The investigative activities that have been completed to date in accordance with the NJDEP-BUST SOW for this UST include installation of five monitoring wells. The well locations are shown on the map in Attachment A and were selected to investigate the magnitude and extent of groundwater contamination associated with this UST. One round of groundwater samples from the wells and associated quality assurance/quality control (QA/QC) samples were collected and analyzed for priority pollutant volatile organic compounds with an EPA/NIH/NBS library search for up to 15 non-priority pollutant compounds (VOC+15) by EPA Method 624 modified to include calibration for xylenes, methyl tertiary butyl ether, and tertiary butyl alcohol.

No free product was found in any of the wells. Total priority pollutant VOCs and xylenes were detected above the unpromulgated NJDEP action level of 10 micrograms per liter (ug/kg or ppb) in only two of the wells (MW-3 and MW-5). The compounds detected in MW-3 and MW-5 consisted primarily of benzene, toluene, ethylbenzene,

and xylenes (BTEX), which are typical gasoline constituents. No priority VOCs or xylenes were detected in the samples from the other wells, including MW-4, which is located within ten feet in a downgradient direction (the groundwater flow direction at the property is generally southwest to northeast based on water level measurements corrected for topographic differences using well survey data) from the UST that was the subject of the investigation.

The lack of even trace VOCs in MW-4, indicates that this UST is not the source of the BTEX concentrations found in MW-3 and MW-5. The results of the groundwater investigation and additional information gathered through interviews with persons familiar with historic operations at the DDPW property suggest that a second gasoline UST that was formerly located between MW-4 and MW-5 as shown on the figure in Attachment A may instead be the source of these concentrations. This UST was reportedly removed five or six years ago, apparently prior to promulgation of federal and state UST regulations. No other information is presently avaiable for this UST.

The additional investigation to be completed prior to submittal of a DICAR is designed to confirm or disprove, if possible, whether the second UST is the source of the detected contamination and to further delineate the extent of contamination. To accomplish this, several additional monitoring wells, including one within 10 feet downgradient of the former location of the second UST, will be installed and sampled, and a soils investigation in the vicinity of the second UST will be completed. The results of the investigation completed to date (including well boring logs, analytical results summary sheets, groundwater contour maps, etc.) will be submitted along with the results of the additional investigative activities upon their completion.

A schedule for implementation of the additional activities and report submittal is included as Attachment B.

Please contact us if you have any questions or require any additional information.

Sincerely,

John S. Virgie
Project Geologist

Jane H. Levandoski
Project Manager

cc: John Dotterweich, NJDEP, Metro Bureau of Regional Enforcement
Joseph A. Ferriero, Esq.
Theodore H. Sobieski, P.G., EEC

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ATTACHMENT A

Site Map

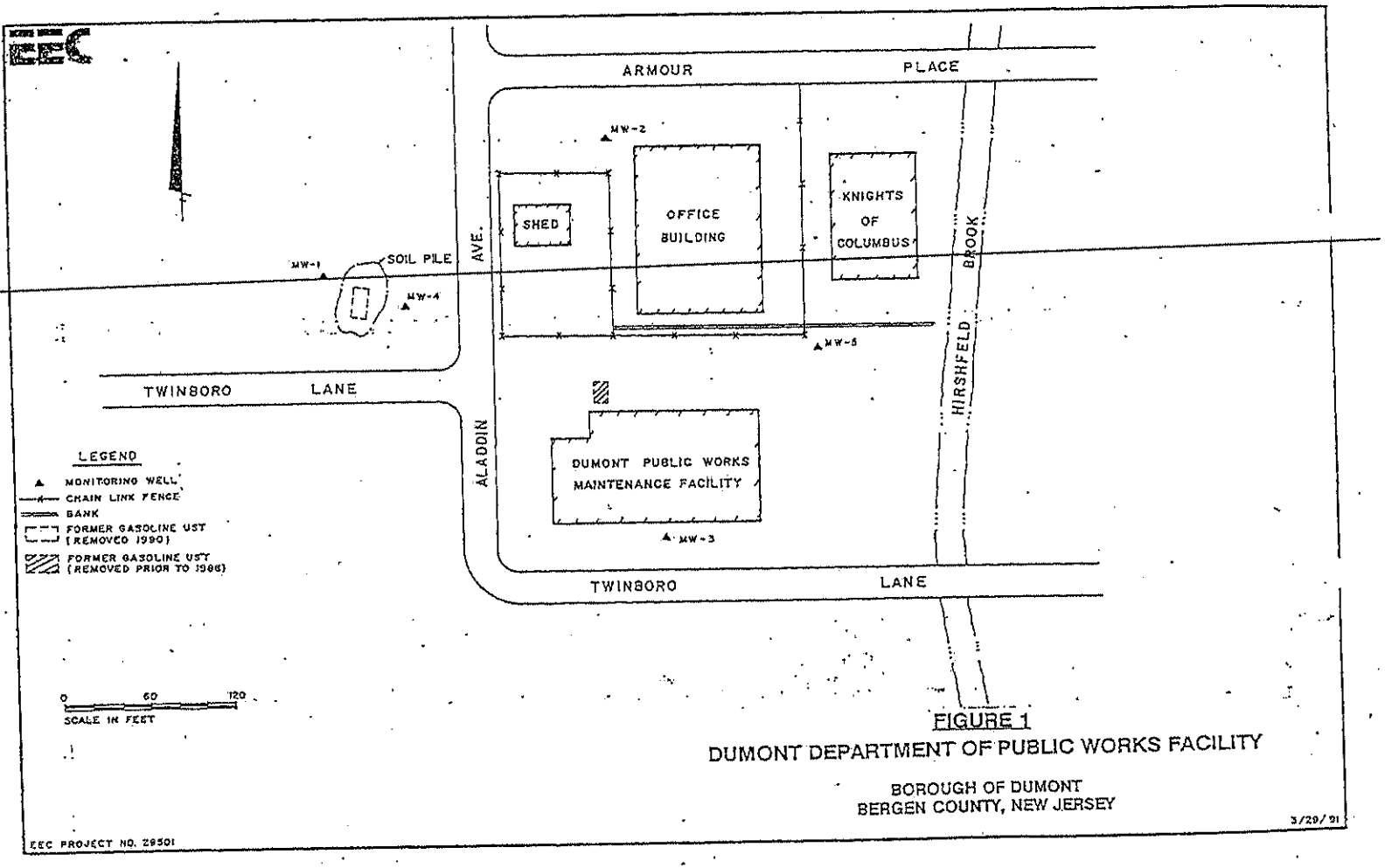

FIGURE 1

DUMONT DEPARTMENT OF PUBLIC WORKS FACILITY

BOROUGH OF DUMONT
BERGEN COUNTY, NEW JERSEY

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ATTACHMENT B

Schedule of Activities

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SCHEDULE OF ACTIVITIES*

Associated with Additional Discharge from Underground Storage Tanks
Dumont Department of Public Works
1 Aladdin Avenue, Dumont, New Jersey Property

Activity	To Be Completed By
Soils investigation	April 17, 1991
Monitoring well installation	April 22, 1991
First round of monitoring well sampling	May 6, 1991
Receipt of soil and groundwater analytical results	June 10, 1991
Submittal of Report to NJDEP	June 24, 1991

* Additional activities (e.g., second round of groundwater sampling, free product recovery, etc.) may be needed depending on the results of the above activities. If this is the case, the schedule of activities will be amended as appropriate and resubmitted.

State of New Jersey
Department of Environmental Protection and Energy
Division of Responsible Party Site Remediation
Metro Regional Office
2 Babcock Place
West Orange, NJ 07052
Tel. # 201-669-3960
Fax. # 201-669-3987

Scott A. Weiner
Commissioner

Karl J. Delaney
Director

November 19, 1991

Joseph A. Ferreiro, Esq.
58-60 Main Street
P.O. Box 157
Hackensack, New Jersey 07602

Re: Borough of Dumont DPW
Underground Storage Tank (UST) Investigation
*** Case No. 90-05-17-1528M ***
File No. 02-10-12
Dumont, Bergen County

Dear Mr. Ferreiro:

On November 7, 1991, an inspection of the above-referenced facility was conducted by a representative of the Metro Regional Office. Ms. Jane Levandoski of EEC Environmental, Inc. was also present. At the time of the inspection, it was determined that fourteen (14) of the fifteen (15) monitor wells were sampled during the last week of October 1991. MW-5 could not be sampled due to the presence of approximately four (4) inches of non-aqueous phase liquid (free product). It was further determined that MW-9 which is located hydraulically downgradient of MW-5 was developing a petroleum sheen at the time of sampling. These observations appear to indicate that a "slug" of free petroleum product is moving from MW-5 in the direction of MW-9.

Pursuant to N.J.A.C. 7:14B-8.2 et seq., the owner of the UST shall remove free product in order to minimize the spread of contamination. Therefore, the Borough of Dumont is required to **immediately** initiate free product recovery in accordance with Section IV.D. of the Scope of Work (copy enclosed). Records of product recovery shall be submitted on a quarterly basis to the Metro Regional Office. These recovery activities shall be undertaken concurrently with those activities which are necessary to complete the final DICAR report due December 20, 1991.

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The Borough of Dumont shall notify this office in writing within seven (7) calendar days of the date of this letter detailing the actions taken to mitigate the spread of free product contamination on-site.

If you have any further questions, please contact me at (201) 669-3960.

Very truly yours,

Gloria T. Grant

Gloria T. Grant
Supervising Environmental Specialist

* Please note that this is the corrected case number. Please refer to this number in all future correspondence.

Enclosure

c: Jane Levandoski, EEC Environmental, Inc.
File

EEC ENVIRONMENTAL INC.

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1100 Alvarado Drive, N.E.
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November 27, 1991

62-10-12

Ms. Gloria Grant
New Jersey Department of Environmental Protection and Energy
Division of Responsible Party Site Remediation
Metro Regional Office
2 Babcock Place
West Orange, NJ 07052

Subject: Procedures for Free-Phase Hydrocarbon (FPHC) Recovery
Borough of Dumont, Department of Public Works
1 Aladdin Avenue
Dumont, New Jersey
Case No. 90-05-17-1528M

Dear Gloria:

This letter confirms our conversation on November 25, 1991 during which we discussed your November 19, 1991 letter regarding initiation of FPHC recovery at the subject property. As I indicated during that conversation, recovery of the FPHC at the subject property was initiated on November 26, 1991.

FPHC recovery will be completed through hand bailing at this time. As we discussed, further remedial efforts involving depression of the water table and recovery of groundwater and treatment of dissolved-phase contamination are premature and not practical at this stage of the investigation. However, such efforts will be incorporated into the overall remedial program for the property which will be evaluated conceptually as part of the Discharge Investigation Corrective Action Report (DICAR) to be submitted December 20, 1991. I understand through our conversation that this is acceptable to you.

Hand bailing will be conducted by Department of Public Works employees following training by EEC in proper procedures and safety considerations. The recovered FPHC will be collected in drums for proper offsite disposal. The frequency at which hand bailing will be performed will be determined during the first several weeks of the recovery effort and will be based on the rate of FPHC recharge in the well(s). The anticipated rate is once per day or couple of days.

To date, recoverable FPHC has only been identified in MW-5; however, a sheen has been observed on water from MW-9, which is located downgradient of MW-5. MW-9 and other wells at the property will be checked for the presence of product on a semi-monthly basis and included in the recovery program, if applicable.

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Records of FPHC recovery, which will include the date, time, volume of FPHC recovered from each well (if more than one well is included in the program), and initials of the person performing the recovery, will be maintained. Measurements of static water level and apparent FPHC thickness will be made on a monthly basis and groundwater contour and FPHC thickness isopleth (if appropriate) maps will be constructed based on these measurements. This information and copy of the FPHC recovery logs will be submitted to NJDEPE on a quarterly basis.

If you have any questions or require additional information, please contact me.

Sincerely,

Jane H. Levandoski
Project Manager

cc: Borough of Dumont Mayor and Council
Joseph A. Ferriero, Esq.
Theodore H. Sobieski, P.G., EEC

State of New Jersey
Department of Environmental Protection and Energy
Division of Responsible Party Site Remediation
CN 028
Trenton, NJ 08625-0028

Scott A. Weiner
Commissioner

Karl J. Delaney
Director

RECEIVED 11/4/92

CERTIFIED
RETURN RECEIPT REQUESTED

OCT 30 1992

Joseph A. Ferreiro, Esq.
58-60 Main Street
P.O. Box 157
Hackensack, NJ 07602

Marvin Katz
Dumont Borough Administrator
50 Washington Avenue
Dumont, NJ 07628

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2501/co/Regi/92-10-30

John Cook, Superintendent
Dumont Department of Public Works
50 Washington Avenue
Dumont, NJ 07628

Re: Dumont Department of Public Works
1 Aladdin Avenue
Dumont Boro, Bergen County
UST # 0026606

Aladdin Park
Twinboro Lane and Aladdin Avenue
Dumont Boro, Bergen County
UST # None

Case # 90-05-17-1528 (aka #'s 86-09-22-10M, 86-10-09-05M, 89-09-30-0853, 90-03-08-1811, 90-05-17-1620, and 91-09-12-1533)

Dear Sirs:

On May 17, 1990, the New Jersey Department of Environmental Protection and Energy (the Department) received notification of a discharge of hazardous substances, regulated under the Underground Storage of Hazardous Substances Act (N.J.S.A. 58:10A-21 et seq), which occurred from the above referenced facility. On August 13, 1990, the Department sent a letter stating the requirements for the proper investigation and the initiation of

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corrective action at the Borough of Dumont's facility. The Department received reports for the Borough of Dumont dated June 1990 and January 1992 indicating that the following steps were taken in compliance with our requirements.

A 1,000 gallon gasoline underground storage tank system (UST) was removed in May 1990 from the Aladdin Park site. Four monitoring wells (MW-1, MW-4, MW-8, and MW-10) have subsequently been installed. Ground water flow direction is northeast. Compounds present above acceptable levels (predominately volatile organics) have been found in MW-8 and MW-10 from the October/November 1991 sampling event. Fifteen test pits (TP-1 through TP-9, TP-11, TP-12, and TP-20 through TP-23) were excavated. Five soil borings (A, A-2, A-3, SB-1, and SB-2) were installed. The highest levels of contaminants (predominately base neutral compounds) above acceptable limits were detected in soil boring A-2.

At the Dumont Department of Public Works (DPW) property (1 Aladdin Avenue), a 4,000 gallon gasoline UST was removed in 1986 or 1987. A 250 gallon waste oil UST was abandoned-in-place prior to 1986. Active at the site are: one 2,000 gallon diesel UST, one 3,000 gallon gasoline UST, and one 250 gallon waste oil UST. Eleven ground water monitoring wells (MW-2, MW-3, MW-5 through MW-7, MW-9, and MW-11 through MW-15) exist on and off site related to the discharges at this facility. Ground water flow direction is northeast. The highest levels of BTEX, 1,2-dichloroethane, naphthalene, bis(2-ethylhexyl)phthalate, TBA, total arsenic, and silver have been detected in MW-8, MW-10, MW-13, MW-14. Twenty-three tests pits were excavated (TP-10, TP-13 through TP-19, and TP-24 through TP-38). Eleven soil borings (B, B-2, B-3, C, C-2, C-3, C-4, D, D-2, E, and E-2) have been installed. Predominately, base neutral compounds have been detected in addition to lead. The surface soils contain sand, silty sand, and clayey silt which is thought to be fill. As of December 5, 1991, free product was detected in MW-5, and a sheen observed in MW-9. Free product has been removed by hand bailing only. An aquifer pumping test was performed.

The NJDEPE well searches indicate the presence of one irrigation well and three domestic wells within 0.5 miles. Hirshfeld Brook constitutes the eastern border of Dumont DPW property. All the domestic wells are located on the opposite side of the brook. The entire area is serviced by public water.

Several concerns exist at these two sites, apparently unrelated to the UST problems. The Borough of Dumont shall address these areas of concern also. They are as follows:

1.) Every soil boring except A/2.5-3.0 exhibits base neutral compounds above acceptable limits. The Borough of Dumont shall fully delineate both horizontally and vertically, the extent of soil contamination. All soil samples shall be analyzed for volatile organics using EPA Method 8240 Priority Pollutant volatile organic scans with a library search; TPHC using EPA Method 418.1 modified for soils; base/neutral organics using

EPA Method 8270 Priority Pollutant Base Neutral Scan with a library search; PCBs using SW-846 Method 8080 by GC using 3540 or 3550 extraction methods; and Priority Pollutant Metals.

All boring logs, including field screening results, shall also be provided. The field screening results shall be reported along with background readings and instrument calibration procedures.

Field screening methods shall not be used to verify contaminant identity or clean zones. However, where 10 or more samples are required for initial characterization sampling at an area of concern (tank or tank area), field screening methods may be used to document that up to 50% of the sampling points within the area of concern are not contaminated. The field screening results shall be reported along with background readings and instrument calibration procedures. The Borough of Dumont shall determine the source of this contamination.

2.) Case # 89-09-30-0853 refers to a burning garbage truck that sought refuge at the DPW property. Chemicals present in the garbage truck included sulfuric acid, nitric acid, phosphoric acid, benzene, sodium hydroxide, cupric nitrate, sulfur, potassium hydroxide, mercuric oxide, and para-dichlorobenzene which are all hazardous substances in concentrated form and dangerous when handled improperly. The fire department presumably extinguished the fire (at least in part) using water. Was the fire truck positioned on a solid impermeable surface such as asphalt or concrete? Where did the water used to extinguish the fire run-off to (soil?, storm sewers? etc.?)? Has the run-off ever been addressed as part of a cleanup? The Borough of Dumont shall furnish the Department with answers to these questions.

3.) Several monitoring wells (MW-3, MW-5, MW-9, MW-12, MW-13, MW-14, and MW-15) exhibit gasoline related components, however, there is no apparent UST source because these wells are either side or up gradient to known USTs. The Borough of Dumont shall determine the source of the gasoline related ground water contamination in said wells.

4.) As can be seen, numerous environmental problems (unrelated to USTs) exist at the DPW and Aladdin Park sites. The Borough of Dumont shall examine historical records to determine if: a.) other unknown USTs might still exist at the two sites; b.) other floor drains other than the ones noted and connected to the active 250 gallon waste oil UST ever existed at the sites; and c.) any dry wells exist or ever existed at the two sites.

The 1,000 gallon gasoline UST in Aladdin Park, although no longer used at the time of removal, appeared to never have been properly abandoned-in-place. Therefore, the Department considers this to have been an active tank at the time of removal in May 1990. Any active tank removed on or after December 21, 1987 must be registered with the Department. Because public streets separate this property from the Dumont Department of Public Works property

provided. The field screening results shall be reported along with background readings and instrument calibration procedures.

Field screening methods shall not be used to verify contaminant identity or clean zones. However, where 10 or more samples are required for initial characterization sampling at an area of concern (tank or tank area), field screening methods may be used to document that up to 50% of the sampling points within the area of concern are not contaminated. The field screening results shall be reported along with background readings and instrument calibration procedures.

Pursuant to N.J.A.C. 7:26-8.5, the Borough of Dumont shall determine if any wastes generated (i.e., excavated soils, spill material, etc.,) are hazardous wastes. The Borough of Dumont shall provide any sample results and the rationale used for the categorization of all wastes generated by this investigation and/or cleanup to assure proper handling and disposal. Please be advised that improper waste treatment, storage or disposal of hazardous wastes is a violation of state and federal Hazardous Waste Regulations. As a reminder, all non-hazardous waste must be removed from the site to an approved facility within six months after generation. The Borough of Dumont shall remove all hazardous waste to an approved facility within 90 days after generation. Interim storage of hazardous waste shall be in accordance with N.J.A.C. 7:26-9. The storage of hazardous waste in piles is strictly prohibited.

The Borough of Dumont shall submit to the Department any waste manifests related to any of the above case numbers.

2. Ground Water

The Borough of Dumont shall sample all ground water monitoring wells without free product. The samples shall be analyzed for volatile organics, MTBE and TBA using EPA Method 624 calibrated for xylenes, plus the identification and quantification of 10 associated peaks (VO+10), and for lead using EPA Method 200.7 (ICAP) or EPA 239.2 (Graphite Furnace) calibrated to achieve a method detection limit of 10 ppb. The SW-846 equivalent for this procedure is ICAP 3010/6010, sample prep 3050/6010 Furnace 3020/7421 sample prep 3050/2421.

Naphthalene has been detected in the past, therefore the samples shall also be analyzed for base/neutral organics using EPA Method 625 plus the identification and quantification of 15 associated peaks (BN+15); volatile organics using EPA Method 624 calibrated for xylenes, plus the identification and quantification of 10 associated peaks (VO+10).

The Borough of Dumont shall continue to delineate ground water contamination, both downgradient and side gradient, after a current round of ground water samples is analyzed. This shall be done by the installation of additional ground water monitoring wells as needed. Any new wells shall be analyzed for volatile

organics (VO+10), base/neutral organics, and lead per the protocol described above.

For each sampling event, the Borough of Dumont shall construct scaled isopleth maps of free product thicknesses where free product exists, and scaled isopleth maps for dissolved product concentrations.

The Borough of Dumont shall construct scaled ground water flow direction contour maps for each sampling event.

3. Receptor Evaluation

The Borough of Dumont shall plot the results of the well search on a scaled map (scale shall be greater than or equal to 1:24,000) in relation to the facility, and The Borough of Dumont shall accurately depict all wells on this map. The Borough of Dumont shall submit a listing of all wells identified cross referenced to the scaled map, and the Borough of Dumont shall submit the list, the map, and any specific information available on the wells to the NJDEPE. The Borough of Dumont shall submit the following information with the results of the well search: the type of well; the status of the well (active, inactive, properly abandoned pursuant to N.J.A.C. 7:9-9 et. seq.), total depth, casing length, open bore hole or screened interval, copies of well records and or well logs on file with the NJDEPE's Bureau of Water Allocation, and any additional records available in county or municipal records. The Borough of Dumont shall submit a listing of all sources referenced in performing the well search. If a referenced agency is unable to provide the information requested, the Borough of Dumont shall provide written documentation that the source was contacted and that the request for information was either denied or that the information was unavailable.

4. Ecological Evaluation

Not required at this time.

B. Quality Assurance

The Borough of Dumont shall submit all Tier II QA/QC data.

It is important to note that effective April 25, 1992, all persons performing tank services must be certified per N.J.S.A. 58:10A-24.1-8. All work related to any tank service must now be conducted by, or under the direct supervision of an individual certified in the activity being conducted. <u>All</u> documents (permit applications, reports, proposals) submitted to BUST must be prepared and signed by a certified individual.

The Borough of Dumont shall notify the assigned BUST Case Manager

at least 14 calendar days prior to implementation of all field activities. If the Borough of Dumont fails to initiate sampling within 30 calendar days of the receipt of this letter, any requests for an extension of the required time frames may be denied.

Administrative Requirements

Based upon the above requirements and the data generated to date, the Borough of Dumont is required to submit a Remedial Action Workplan. This document shall be submitted to this Bureau at the above address, within **ninety (90)** days upon receipt of this letter. The Remedial Action Workplan shall: a) detail all activities conducted to achieve compliance with the requirements listed in this letter; and b) present a comprehensive remedial proposal for all soil and ground water contamination present as the result of your discharge(s) based upon all data collected to date. Please note that only one copy of the Quality Assurance/Quality Control Deliverables is needed. Guidance regarding the minimum requirements and presentation format for this document are provided below.

The proposed "Technical Requirements for Site Remediation" rules (N.J.A.C. 7:26E) appeared in the May 4, 1992 New Jersey Register. These proposed rules provide guidance concerning the environmental investigation and remediation at contaminated sites or sites at which contamination is suspected. Prior to promulgation, these proposed rules will be used as the Department's primary guidance document, replacing the Division of Responsible Party Site Remediation's Remedial Investigation Guide, the ECRA Cleanup Plan Guide, the Bureau of Underground Storage Tanks'(BUST) Scope of Work document (and appendices) and the BUST Technical Guidance Document.

It should be noted that technical requirements are included in subchapters 7, 8 and 9 of the Underground Storage of Hazardous Substances Act (N.J.A.C. 7:14B-1-13 and 15). If the person responsible for conducting an environmental investigation/ remediation chooses to apply the proposed rules to their site, all applicable guidance appearing in the proposed rules should be followed to accomplish the investigation. This will allow for consistent evaluation of any discharges and potential impacts.

In addition, the proposed "Cleanup Standards for Contaminated Sites" rules (N.J.A.C. 7:26D) appeared in the February 3, 1992 New Jersey Register. These shall be used as guidance to determine: what concentration of contaminants need to be present at a site to consider the site contaminated; which areas of environmental concern need additional investigation; and the concentration of a contaminant allowed to remain for a site to be considered "clean".

When the person responsible for conducting a cleanup agrees to remediate a contaminated site consistent with the proposed cleanup standards, no further discussion on the identification of

cleanup standards will be necessary. It shall be remembered, however, that upon adoption, or at any time thereafter, if the cleanup standard for a given contaminant is revised, then remediation to achieve that adopted cleanup standard may be required.

If the person responsible for conducting a cleanup does not agree to remediate a contaminated site consistent with the proposed cleanup standards, then the NJDEPE cannot require compliance with the proposed standards at this time. In these circumstances, the responsible party shall submit a proposal to the NJDEPE that details the site specific circumstances and technical rational for proposed cleanup goals on a case-by-case basis.

Remedial Action Workplan Submission

A. <u>The Remedial Action Workplan Format</u>

To insure a complete and timely review of the submittal, the Remedial Action Workplan shall be a self-supporting document. As a guide to this process, the following elements shall be included in the formation of the plan:

1. Table of Contents

2. Introduction. Include site acreage, site use during the release, current site use, local land use, local topography, geology, and hydrogeology.

3. Summary of UST-Related Environmental Concerns. This shall include the results of all previous soil and ground water sampling in tabular form, including scaled site maps. A detailed presentation of the items required (above) in this letter shall be included.

4. Summary of Proposed Remedial Actions. This shall include a detailed description of the remedial technology(s) to be utilized, the media to be affected by each technology, scaled site maps detailing the areas where remedial action will be conducted, supporting technical information appropriate to the technology and volumes of each media to be remediated (including vertical and horizontal extent). The following technical information shall be included, where applicable to the remedial technology chosen: a) the hydraulic conductivity of the affected aquifer(s), including calculations; b) calculations and maps showing the predicted capture zones; c) calculations of the optimum pump rate and number of ground water and/or air withdraw points, or trench configuration required to control the plume; d) calculation of the ground water velocity prior to pumping; e) grain size analyses; and f) soil total organic carbon content and pH. Also included shall be a map(s) and description of the ground water monitoring wells to be used to monitor the effectiveness of the remediation, both at the source and at downgradient compliance points.

5. Identification of the treatment and disposal methods to be employed for any ground water or soil to be removed.

6. Cleanup level to be achieved. Be specific with regard to media and parameters.

7. Summary of any permits necessary to implement the cleanup. Please note that the NJDEPE will not approve a Remedial Action Workplan which proposes to discharge to a publicly-owned treatment works (POTW) without the prior written consent of the POTW.

8. The Workplan shall detail the specific activities that will be used to complete the proposed cleanup objectives.

9. A post-remedial sampling and monitoring plan for each media to be remediated.

10. A specific time table for implementation of the Remedial Action Workplan which includes milestones in the project.

11. Quarterly progress reports, for the duration of the cleanup.

12. Estimate of costs for the cleanup, which shall include:

a. capital costs
b. operation and maintenance costs
c. monitoring system costs
d. laboratory costs
e. engineering, legal and administrative costs
f. contingency costs
g. summary of all remedial costs incurred to date (see below)

An administrative checklist is provided (Attachment #1) and should be used as additional guidance when formulating the Remedial Action Workplan.

If the items listed in subchapter 4 of the proposed "Technical Requirements for Site Remediation" (sections 4.8 and 4.9) have not been submitted in prior reports, they should be included in the Remedial Action Workplan.

A summary of the **total** cost of cleanup (actual or anticipated) shall be submitted with any RAW or request for No Further Action. This shall be broken down as follows: tank removal and disposal costs; capital costs including monitoring systems and equipment; mobilization costs; operation and maintenance including labor, utilities and repairs; consulting and labor costs including engineering, environmental, legal and administrative costs; analytical/laboratory costs; sample collection costs; and disposal costs including transportation, waste transfer fees and facility tipping fees.

B. Data Presentation

Summarized analytical results are required in tabular form. Borough of Dumont shall also submit with the analytical data, all documents associated with the sampling and testing, including, but not limited to, lab sheets, chain of custodies, results of blank analyses, lab chronicles, summaries of analytical instrument tuning and analytical methods used. The NJDEPE recommends that the Borough of Dumont refer to the attached "Guidelines for Data Presentation" for additional guidance in the preparation of its submittal (Attachment #2). The Borough of Dumont shall collect all samples in accordance with the sampling protocol outlined in the May, 1992 edition of the "NJDEPE Field Sampling Procedures Manual".

C. Permit Applications

All appropriate permit applications shall be submitted either prior to or in concert with the Remedial Action Workplan submission. Copies of all permit application cover letters shall be provided with the Remedial Action Workplan. In addition, the Department has recently established the Office of Permit Information Assistance (OPIA). OPIA's responsibilities include providing permit information to the public and assisting permit applicants through the permit coordination process when a project requires permits from various programs. OPIA can be reached at (609) 984-0857.

As a reminder, a NJPDES Discharge to Ground Water (NJPDES-DGW) permit will be required for all active ground water remediation (and some on-site soil treatment technologies) and natural proposals. Please note that if ground water remediation activities result in a discharge to surface water, The Borough of Dumont shall also obtain a NJPDES Discharge to Surface Water Permit (NJPDES-DSW), Category B (Industrial/Commercial Surface Water Discharge) or Category B4 (General Permit Fuel Cleanup). Any discharge to a publicly owned treatment works (POTW) in excess of 25,000 gallons per day requires a NJPDES Significant Indirect User Permit (NJPDES-SIU), Category L (Indirect Discharge to POTW). If ground water will be treated prior to discharge, a treatment works approval (TWA) shall also be obtained. Air discharges from vapor extraction systems also require permits. Finally, surface or ground water withdrawal in excess of 100,000 gallons per day (or 10,000 gallons or more in critical aquifers) requires approval by the Department. For further information contact the Bureau of Information Services (NJPDES-DSW or SIU) at (609) 984-4428, the Bureau of Industrial Discharge Permits (TWA) at (609) 292-4860, the Bureau of New Source Review (Air Permits) at (609) 292-6716, or the Bureau of Water Allocation (ground water withdrawal) at (609) 292-2957.

As per N.J.A.C. 7:14B-12.1, the owner and operator of regulated underground storage tanks are joint and severally liable for compliance with these regulations. Failure to comply with the requirements detailed above may result in the assessment of

penalties as provided for by the Water Pollution Control Act, N.J.S.A. 58:10A-1 et seq. and the Underground Storage of Hazardous Substances Act, N.J.S.A 58:10A-21 et seq. Violators are liable for penalties of up to $50,000 per day for each day of continuing violation.

If you have any questions, please contact John Ruhl of the Bureau of Underground Storage Tanks, Tank Management Section - Phase II, at (609) 984-3156.

Sincerely,

Kevin F. Kratina, Acting Chief
Bureau of Underground Storage Tanks

c: Steven Tiffinger, Bergen County Department of Health Services, 327 East Ridgewood Avenue, Paramus, NJ 07652-4895
John Ruhl, Bureau of Underground Storage Tanks
Jane Levandoski, EEC Environmental Inc., 131 North Third Street, Philadelphia, PA 19106

Enclosures:
UST Registration Package
Attachments 1 & 2
Soil Re-Use Guidelines
Laboratory Deliverables

RECEIVED JUN 1 5 1995

State of New Jersey

Department of Environmental Protection

Christine Todd Whitman
Governor

Robert C. Shinn, Jr.
Commissioner

Bureau of Underground Storage Tanks
CN-028
401 East State Street
Trenton, NJ 08625

JUN 12 1995

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

John Dudas, Jr.
Dumont Borough Attorney
14 W. Madison Avenue
Dumont, NJ 07628

Marvin Katz
Dumont Borough Administrator
50 Washington Avenue
Dumont, NJ 07628

John Cook, Superintendent
Dumont Department of Public Works
50 Washington Avenue
Dumont, NJ 07628

RE: Aladdin Park
Twinboro Lane and Aladdin Avenue
Dumont Borough, Bergen County
Case # 90-05-17-1528 (aka #s 90-05-17-1620, 91-09-12-1533, & 90-03-08-1811)
UST # 0243632
Remedial Action Workplan Dated: January 17, 1995

Dear Sirs:

The Department of Environmental Protection's (Department) Bureau of Underground Storage Tanks (BUST) has completed its review of the above referenced document. BUST has reviewed the aspects of the above referenced document that relate to the former regulated underground storage tank system (UST). Please be advised that the document, as it relates to the former UST cannot be approved as a Remedial Action Workplan (RAW). The aspects of the investigation not related to the regulated UST will not be reviewed by BUST because BUST has only statutory authority to manage UST issues. The remainder of the RAW will be forwarded to another group within the Department which has the statutory authority to handle the non-UST issues. As explained in a previous letters, if the Borough of Dumont wishes to have only one Department case manager overseeing the site, then the Borough of Dumont must enter into a Memorandum of Agreement (MOA) [document previously sent] requesting that both the UST issues and non-UST issues be handled simultaneously through an MOA.

EXHIBIT
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In an effort to continue the UST investigation at this site, the document is hereby conditionally approved as a Remedial Investigation Workplan (RIW). The remaining deficiencies are described below.

I. Soils

Area of Concern #1 (AOC #1): Former 1,000 gallon gasoline UST located approximately 50 feet north of Twinboro Lane and 50 feet west of Aladdin Avenue.

Soil Sampling Requirements

Although 15 test pits and 5 soil borings were installed on-site in numerous locations across the site, none of the test pits nor any of the borings were installed in the former excavation area. Because post-excavation soil sampling relevant to the UST excavation was not conducted when the gasoline tank was removed, or any time thereafter, soil sampling of the former excavation is required to ensure that soil contamination does not exist. The sampling locations and frequency shall be in accordance with N.J.A.C. 7:26E-6.3 and 6.4. If the excavation was enlarged horizontally beyond the immediate tank removal area, additional soil samples shall be taken pursuant to N.J.A.C. 7:26E-6.4(a)2i-iv.

The boring depths shall correlate with the former depth of the excavation and shall be located within the native soil. Sample depths shall be determined pursuant to N.J.A.C. 7:26E-6.4. Field screening of the soil borings shall be conducted because the tank contained volatile organic compounds. Samples shall also be collected in the area of all former piping and dispensers in accordance with N.J.A.C. 7:26E-3. Locations should be biased towards potential discharge areas (joints, connections, etc.). All samples shall be analyzed for volatile organics using EPA Method 8240 calibrated for xylenes, with a library search (VOs+10), and for lead using SW-846 Methods 3050 and 3051 using Inductively Coupled Argon Plasma Atomic Emission Spectrometric Method (ICAP) or Graphite Furnace. All boring logs, including field screening results, shall also be provided. The field screening results shall be reported along with background readings and instrument calibration procedures.

Dumont Borough shall submit a scaled, site diagram indicating the exact location and orientation of the former 1,000 gallon gasoline UST and associated product-bearing piping, dispensers/pump islands, monitoring wells, subsurface conduits and utilities, existing structures, etc. Once the required soil borings are obtained and analyzed, Dumont Borough shall record their location on the above scaled, site diagram relative to the appurtenances mentioned, and include the outline of the former excavation. Dumont Borough shall also include the depth of the sample interval used for analysis, and list all compounds detected with the respective concentrations onto the site diagram.

Backfill Documentation

Dumont Borough shall submit documentation certifying that the material used as backfill is free of contaminants and meets all requirements pursuant to N.J.A.C. 7:26E-6.4(b). Please note that the Department may require sampling of any backfill suspected to be contaminated.

The Department's most recent general guidance on contaminant cleanup criteria can be found in the April 1994, edition of the Site Remediation Newsletter. It must be remembered, however, that the actual cleanup goal at a particular site is determined by the Department on a case-by-case basis and may be different than that in the above referenced newsletter. This variation may be due to many factors, including site specific human health and environmental exposure pathways, the presence of site contaminants not addressed in the newsletter, and site specific physical characteristics. In case specific situations, when cleanup criteria is modified from one previously established for that specific site, the Department will make every effort to expeditiously notify the responsible party. Please consult the case manager listed below to discuss any modifications which may impact your remedial actions.

If the person conducting a cleanup does not wish to remediate a contaminated site consistent with the newsletter, they shall submit a proposal to the case manager listed below that details the site specific circumstances and technical rationale for cleanup goals on a case-by-case basis.

Please note that the Ground Water Quality Standards (N.J.A.C. 7:9-6) have been adopted and appeared in the February 1, 1993, New Jersey Register. This rule adoption may impact requirements for ground water remediation and soil cleanup (i.e. where the soil may contribute contaminants to the ground water above the applicable standards) for a particular site and should be referenced and discussed with the case manager listed below.

II. Ground Water

A. Ground Water Monitoring

Four (4) monitoring wells (MW-1, MW-4, MW-8, MW-10) have been installed on-site, and another three (3) ground water monitoring wells (MW-2, MW-16, and MW-17) are installed off site. The subsurface appears to consist of fill overlying glacially deposited sediments. Bedrock has not been encountered in the well borings. Slug tests on several of the wells on the nearby Dumont Department of Public Works site indicates that ground water is flowing at a rate of 17 feet per year. Ground water flow has been determined to be northeast. Depth to ground water during the most recent sampling event ranged from 3.5 to 9.7 feet below grade. Free phase product has never been detected in any of the monitoring wells. To date five (5) ground water sampling events have been conducted, the most recent in October 1994. For the October 1994 sampling event, only monitoring wells MW-2, MW-8, MW-10, MW-16, and MW-17 were sampled. The samples were analyzed for VO+10, total xylenes, MTBE, and TBA.

The results of the October 1994 sampling event exceeding the Ground Water Quality Standards are as follows (ppb): MW-8 with 30 ppb benzene and 1,400 ppb total xylenes; MW-10 with 1,400 ppb benzene, 830 ppb ethylbenzene, and 600 ppb total xylenes. Please note, the Department compares the library search tentatively identified compounds (TICs) to the standards for Synthetic Organic Chemicals (SOCs) found at N.J.A.C. 7:9-6. As such, individual TICs are be compared to the interim generic criterion of 100 ppb for individual non-carcinogenic compounds. All TICs detected in a ground water sample are compared to the 500 ppb total SOCs interim generic criterion. Therefore, MW-8 exhibited three individual TICs exceeding the 100 ppb criterion and a total of 1,194 total TICs exceeded the 500 ppb total TICs criterion. Also, MW-10 exhibited ten individual TICs exceeding the 100 ppb criterion and total TICs at 2,890 ppb exceeded the 500 ppb criterion.

Because a site diagram has not been submitted that locates the monitoring wells relative to the former tank excavation, it is difficult to determine the location of the wells relative to the source area of the gasoline contamination. Dumont Borough shall submit a scaled, site diagram indicating the exact location and outline of the former UST and associated piping, dispensers/pump islands, as related to monitoring wells, subsurface conduits and utilities, existing structures, etc.

B. Contaminant Plume Delineation

By overlapping site diagrams submitted in previous reports, it appears that MW-1 is located hydraulically up gradient of the former excavation. In order to adequately define the gasoline plume, Dumont Borough shall install additional ground water monitoring wells to fully delineate the horizontal and vertical extent of ground water contamination. Contamination shall be delineated to the Ground Water Quality Standards, N.J.A.C. 7:9-6, unless otherwise approved by the Department. At a minimum, a ground water monitoring well shall be installed:

- ✓ hydraulically downgradient and within ten (10) feet of the former UST excavation in order to determine source area concentrations;
- ✓ midway between MW-10 and MW-16 to more accurately define the lateral extent of the plume on the northern side;

✓ on the corner of Aladdin Avenue and Armour Place (DPW property) to better define the downgradient extent of the plume.

If it is necessary to install wells off-site, Dumont Borough shall provide documentation of written requests seeking access to install said monitoring wells on off-site properties within thirty (30) calendar days of receipt of this correspondence. Please be advised that N.J.S.A. 58:10B, a statute concerning site remediation, provides a cause of action for persons to obtain access to properties not owned by that person for the purpose of conducting remedial activities at that site. Please see the enclosed "Guide for Submission of Remedial Action Workplans" on this provision of N.J.S.A. 58:10B for further information.

Dumont Borough shall submit boring logs and the monitoring well construction details (Monitoring Well Certification Forms A and B, enclosed) for all newly installed monitoring wells. Dumont Borough shall also complete and submit Monitoring Well Certification Forms A and B for existing wells MW-1, MW-2, MW-4, MW-8, MW-10, and form A for MW-16 and MW-17. Copies of the forms are found in the "Guide for Submission of Remedial Action Workplans"

C. Ground Water Monitoring and Reporting Requirements

On a semi-annual basis and until a ground water RAW is approved, Dumont Borough shall sample every monitoring well which does not contain free product and analyze the samples for **benzene, toluene, ethylbenzene, total xylenes, MTBE, and TBA** provided an EPA approved method which employs gas chromatography is used; and for **lead (Pb)** using EPA Method 200.7 (ICAP) or EPA 239.2 (Graphite Furnace). The SW-846 equivalent for this procedure is ICAP 3010/6010, sample prep 3050/6010 Furnace 3020/7421 sample prep 3050/2421.

For each sampling event, Dumont Borough shall submit a table to include for each monitoring well: 1.) top of casing elevation; 2.) top of screen elevation; 3.) ground water elevation (corrected for free phase product if present); 4.) free phase product elevation (if present); and 5.) free phase product thickness (if present).

For each sampling event, Dumont Borough shall construct a scaled isopleth map of free product thickness where free product exists, and scaled isopleth maps for dissolved product concentrations. Dumont Borough shall submit the updated maps with each subsequent submittal.

Dumont Borough shall construct and submit scaled, ground water table contour maps for each ground water sampling event. A ground water contour map reporting form, see the Department's March 1995 "Guide for the Submission of Remedial Action Workplans", shall accompany each ground water contour map submittal.

D. Classification Exception Areas (CEAs)

Classification Exception Areas (CEAs) pursuant to the Ground Water Quality Standards (N.J.A.C. 7:9-6. et. seq.) apply to all site remediation cases involving ground water contamination above applicable standards. A designated CEA shall also act as a Well Restriction Area pursuant to N.J.A.C. 7:9-6.6(d).

As a result of the ground water contamination at this site, a CEA shall be established at the time of remedial action workplan (RAW) or no further action (NFA) approval, as applicable. The proposed RAW or NFA shall include, and will not be approved without, the following:

1) latitude and longitude with an accuracy to 1/10 of a second and lot and blocks of impacted properties;

NOTE: Site boundaries can define the CEA if no offsite contamination is expected to occur for the duration of the CEA;

2) list of affected aquifers;
3) list of contaminants of concern;
4) estimated longevity of the CEA, based upon the most mobile and persistent compounds, to meet the GWQS. (As appropriate, existing monitoring data shall be used to verify models.) For cases involving active remediation, the longevity of the CEA may be indeterminate but not permanent;

Note: See the attached CEA Guidance Document for further discussion

5) the mapped boundaries of the CEA on a USGS 7.5 minute quadrangle map;
6) FOR GROUND WATER USE AREAS*: The CEA shall be presented in Geographic Information System (GIS) Format (see the attached CEA Guidance Document for more information on the GIS you can obtain the NJDEP "GIS - Mapping the Present to Protect New Jersey's Future - Mapping and Digital Data Standards" available from the NJDEP, Bureau of Revenue, CN417, Trenton NJ 08625);
7) FOR GROUND WATER USE AREAS: Impacted property owners and local officials (mayor, planning board and health department) must be notified by certified mail. The notice shall inform them of the CEA and ground water use restriction (discuss with case manager before defining) prior to submittal of the proposed RAW or NFA and solicit comments to be submitted to the Department's case manager. **The RAW or NFA will not be approved without proof and copies of notification.** The Department suggests that contact be made with your case manager to discuss the boundaries of the CEA prior to public notification.

NOTE: If a RAW will be proposed for ground water remediation that does not currently include the full extent of the plume, the CEA can be proposed for that portion being remediated. The CEA boundaries and longevity can be adjusted over time.

***Ground Water Use Areas** shall be defined as those locations with current or future ground water use (potable, industrial, agricultural, etc.). Current ground water use shall be based on the Department's Bureau of Water Allocation files, consulting the New Jersey Water Supply Master Plan (copies available in the Office of Environmental Planning), contacting the local or regional water purveyor, and, as necessary, conducting a door-to-door canvass. Future ground water use (over a 25-year planning horizon) can be determined from local or regional water purveyors, local or county planning boards and boards of health and the New Jersey water Supply Master Plan.

III. Receptor Evaluation

A. Utilities

The nearest utility receptors are a sanitary sewer line at a depth of 7.5 ft located approximately 60 feet east (downgradient) and a natural gas line at a depth of 2.5 to 3.0 feet located approximately 65 feet east (downgradient). The sanitary sewer line may have an influence on plume migration direction (adding a northerly component).

Dumont Borough shall identify the possible interconnection of ground water to the subsurface sanitary sewer and natural gas lines located along Aladdin Avenue and determine the depth of invert, the diameter and construction specifications of the subsurface structures. Dumont Borough shall determine whether the either utility may be acting as a conduit for ground water migration, either along the bedding plane or within the structure itself, or whether the subsurface structures may be acting as a barrier for ground water migration because the depth to ground water at the site is shallow. Sampling of the sanitary sewer water may be required pursuant to N.J.A.C. 7:26E-4.5, if applicable. If an interconnection is identified, utilities shall also be checked for signs of contamination. This may be completed through visual inspection and use of field screening instruments.

B. **Surface Water Body**
The nearest surface water body is Hirshfeld Brook, located approximately 500 ft east (downgradient). Ground water sampling results indicate the plume does not threaten the brook.

C. **Well Searches**
A total of three domestic wells and one irrigation well are located less than 2,500 feet from the site. The closest well is 1,500 ft downgradient. However, it is on the opposite side of Hirshfeld Brook and is not likely to be affected because of its distance from the plume, Hirshfeld Brook would most likely act as a receptor intersecting the plume, the distance between the gasoline discharge and the well, and that it is calculated that it would take almost a century before the plume could migrate the necessary distance.

D. **Basements**
Because MW-16 and MW-2 have exhibited volatile organic compounds, Dumont Borough shall determine whether basements are present along the portion of the northern side of Armour Place, between Aladdin Avenue and Hirshfeld Brook. Should levels of contaminants in MW-2, MW-16, MW-17, or the required monitoring well on the corner of Aladdin Avenue and Armour Place exceed the GWQS, then Dumont Borough may be required to determine the presence/absence of gasoline vapors in accordance with N.J.A.C. 7:26E-4.4(h)4.

IV. Quality Assurance

A. All data submitted shall conform to the "Technical Requirements for Site Remediation," N.J.A.C. 7:26E, except where specifically indicated.

B. In accordance with the "Technical Requirements for Site Remediation," specifically N.J.A.C. 7:26E-3.10(b) 3, a technical overview is required for any report submission. As part of that overview, a discussion regarding the reliability of the laboratory analytical data, shall be included. Please see Appendix 2 of the March 1995 Guide for the Submission of Remedial Action Workplans.

C. Dumont Borough shall indicate on future chain-of-custody forms, the method of refrigeration used to maintain the samples at the target temperature of 4°C.

V. Other

A. **Certification Requirements**
It is important to note that effective April 25, 1992, all persons performing tank services must be certified per N.J.S.A. 58:10A-24.1-8. **All work related to any tank service must now be conducted by, or under the on-site immediate supervision of an individual certified in the activity being conducted.** All documents (permit applications, reports, proposals) submitted to BUST must be prepared and signed by a certified individual.

B. **Field Activity Notification**
Dumont Borough shall notify the assigned BUST case manager at least 14 calendar days prior to implementation of field activities. If Dumont Borough fails to initiate sampling within 30 calendar days of the receipt of this letter, any requests for an extension of the required time frames may be denied.

C. **Cost Recovery**
On April 5, 1993, the UST Fee Rule (Amendments and New Rules at N.J.A.C. 7:14B) was proposed. This rule appeared in the February 22, 1994, New Jersey Register. Effective February

22, 1994, the Department will be billing you for the Department's oversight of all work conducted at your site. Documents submitted in accordance with the "Technical Requirements for Site Remediation" (N.J.A.C. 7:26E) will help reduce the time necessary for the oversight of the above referenced site. At this time, the Department intends to process bills on a semi-annual basis. Please consult the April 5, 1993, and February 22, 1994, State Registers for details. Copies can be obtained by contacting the Office of Administrative Law at (609) 588-6500.

D. **Effective Analysis and Certification**
Dumont Borough shall submit an Effectiveness Analysis and Certification. This submission shall include an analysis and certification that the proposed remedial action meets the criteria contained in Section 35 (g) of P.L. 1993, c.139, including an analysis of long and short term effectiveness, implementability, timeliness, cost differential of permanent and nonpermanent remedies (if applicable), and community concerns. Please note that the Effectiveness Analysis and Certification supersedes the Remedial Alternative Analysis in N.J.A.C. 7:26E-5.

Dumont Borough shall resubmit a more detailed RAW proposal for both soil and ground water once the above requirements are accomplished.

VI. Administrative Requirements

Based upon the above requirements and the data generated to date, Dumont Borough is required to submit a revised RAW in accordance with N.J.A.C. 7:26E-6.2 and P.L. 1993, c.139 (S-1070). This document shall be submitted to this Bureau at the above address, within ninety (90) days upon receipt of this letter. The Revised RAW shall detail all activities conducted to achieve compliance with the requirements listed in this letter. Additionally, the Revised RAW shall present a comprehensive remedial proposal for all soil and ground water contamination present. Guidance regarding the minimum requirements and presentation format for this document are provided in the March 1995 "Guide for the Submission of Remedial Action Workplans."

It should be noted that if Dumont Borough completes the above requirements, and the data indicate that the remedial investigation has not been completed (i.e., contamination not completely delineated), Dumont Borough shall submit a RIW in accordance with N.J.A.C. 7:26E-4.8 within the specified time frame. The RIW shall include a schedule of implementation of the remaining remedial investigation required and the submittal date of the Revised RAW. Dumont Borough also has the option of completing the remaining remedial investigation in accordance with N.J.A.C. 7:26E-4, followed by the submission of the RIR/RAW. If the latter option is selected, Dumont Borough shall notify the case manager listed below, in writing, within two weeks prior to the specified time frame referenced above. This notification shall include a generic discussion of activities conducted to date and activities to be conducted, as well as a detailed schedule of implementation which includes the submission of the RIR/RAW.

Please note, pursuant to N.J.S.A. 58:10A-21 et seq. and N.J.A.C. 7:14B et seq., the owner and operator of the regulated underground storage tanks are strictly liable for compliance with these requirements. In addition, all state regulated USTs, except for heating oil USTs for on-site consumption, are regulated under 40 CFR Part 280. Non-compliance with these federal and state regulations exposes the tank owner and operator to the penalty and liability specified in 40 CFR Part 280, N.J.S.A. 58:10A-21 et seq. and N.J.A.C. 7:14B et seq.

If you should have any questions regarding this matter, please contact John Ruhl, Senior Geologist and case manager, of the Bureau of Underground Storage Tanks at (609) 984-3156.

Sincerely,

John Ruhl

for Lee Hendricks, Unit Supervisor
Bureau of Underground Storage Tanks

enclosures:
Guide for Submission of Remedial Action Workplans
Management of Excavated Soils
CEA Guidance Document

c: Steven Tiffinger, Bergen County Department of Health Services, 327 East Ridgewood Avenue, Paramus, NJ 07652-4895
Joseph Ferreiro, 58-60 Main Street, P.O. Box 157, Hackensack, NJ 07602
Gregory Albright, Harding Lawson Associates, One Meadowlands Plaza, Suite 1090, East Rutherford, NJ 07073 **(w/enclosures)**

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PS Form 3800, March 1993

State of New Jersey

Department of Environmental Protect

Christine Todd Whitman
Governor

Bureau of Underground Storage Tan
CN-028
401 East State Street
Trenton, NJ 08625

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Marvin Katz
Dumont Borough Administrator
50 Washington Avenue
Dumont, NJ 07628

John Cook, Superintendent
Dumont Department of Public Works
50 Washington Avenue
Dumont, NJ 07628

John Dudas, Jr.
Dumont Borough Attorney
14 W. Madison Avenue
Dumont, NJ 07628

Re: Dumont Department of Public Works
1 Aladdin Avenue
Dumont Borough, Bergen County
Case # 86-10-09-05M (a.k.a. # 86-09-22-01M)
UST # 0026606
TMS #s C93-3817, C93-3818, and C93-3822
Site Investigation Report Dated: May 13, 1994
Remedial Action Workplan Dated: January 17, 1995

Dear Sirs:

The Department of Environmental Protection (Department) has completed its review of the above referenced document. Please be advised that the document cannot be approved as a Remedial Action Workplan (RAW). However, in an effort to continue the investigation at this site, the document is hereby conditionally approved as a Remedial Investigation Workplan (RIW).

The aspects of the investigation unrelated to the regulated UST discharges cannot be reviewed by the Bureau of Underground Storage Tanks (BUST) because BUST only has statutory authority to manage regulated underground storage tank system (UST) issues. The remainder of the RAW will be forwarded to another group within the Department which has the statutory authority to handle the non-UST issues. As explained in previous letters, if the Borough of Dumont wishes to have only one Department case manager

EXHIBIT K

overseeing the site, then the Borough of Dumont must enter into a Memorandum of Agreement (MOA) [document previously sent] requesting that both the UST issues and non-UST issues be handled simultaneously through an MOA.

In an effort to continue the UST investigation at this site, the document is hereby conditionally approved as a Remedial Investigation Workplan (RIW). The remaining deficiencies are described below.

I. Soils

Area of Concern # 1 (AOC) #1: Former 3,000 gallon UST [Tank E1] located at the south side of the "shed", that last contained unleaded gasoline.

The UST was removed in January 1994 under the authority of Closure Approval TMS # C93-3817. Nine soil samples (E-1-1 through E-1-9) were obtained at the base (5 foot depth) of the former excavation, arranged in a 3x3 grid. All samples were analyzed for volatile organics including ten library search compounds (VO+10) and lead (Pb). All results meet the most stringent Soil Cleanup Criteria.

Please note, the laboratory data submitted did not include analysis for total xylenes, which is specifically required as stated in Table 2-3 at N.J.A.C. 7:26E-2.1(d). Because the post-excavation soil samples did not include analysis for total xylenes, Dumont Borough shall again sample the excavation for total xylenes to complete the Site Investigation (SI) requirements and ensure that soil contamination does not exist. The sampling locations and frequency shall be in accordance with N.J.A.C. 7:26E-6.3 and 6.4. If the excavation was enlarged horizontally beyond the immediate tank removal area, additional soil samples shall be taken pursuant to N.J.A.C. 7:26E-6.4(a)2i-iv.

The boring depths shall correlate with the former depth of the excavation and shall be located within the native soil. Sample depths shall be determined pursuant to N.J.A.C. 7:26E-6.4. Field screening of the soil boring shall be conducted if the tank contained volatile organic compounds. Samples shall also be collected in the area of all former piping and dispensers in accordance with N.J.A.C. 7:26E-3. Locations should be biased towards potential discharge areas (joints, connections, etc.). All samples shall be analyzed for total xylenes using an EPA Approved Method calibrated for total xylenes.

Area of Concern # 2 (AOC) #2: Former 4,000 gallon gasoline [Tank E2], former 2,000 gallon diesel [Tank E3], and former 250 gallon waste oil [abandoned-in-place prior to passage of UST Law] USTs located at the northwest corner of the DPW Maintenance Building.

No soil sampling has been performed for the 4,000 gallon gasoline UST that meets the requirements of the Department's October 30, 1992, letter, and N.J.A.C. 7:26E. Because post-excavation soil sampling was not conducted when the gasoline tank was removed, soil sampling is required to ensure that soil contamination does not exist. The sampling locations and frequency shall be in accordance with N.J.A.C. 7:26E-6.3 and 6.4. If the excavation was enlarged horizontally beyond the immediate tank removal area, additional soil samples shall be taken pursuant to N.J.A.C. 7:26E-6.4(a)2i-iv.

The boring depths shall correlate with the former depth of the excavation and shall be located within the native soil. Sample depths shall be determined pursuant to N.J.A.C. 7:26E-6.4. Field screening of the soil boring shall be conducted if the tank contained volatile organic compounds. Samples shall also be collected in the area of all former piping and dispensers in accordance with N.J.A.C. 7:26E-3. Locations should be biased towards potential discharge areas (joints, connections, etc.). All samples shall be analyzed for volatile organics using EPA Method 8240 calibrated for xylenes, with a library search (VO+10) and for lead using SW-846 Methods 3050 and 3051 using Inductively Coupled Argon Plasma Atomic Emission Spectrometric Method (ICAP) or Graphite Furnace.

The 2,000 gallon diesel UST was removed in January 1994 under the authority of Closure Approval TMS # C93-3818. Nine soil samples (E-3-1 through E-3-9) were obtained in a 3x3 grid pattern from the base of the excavation at the time of tank removal. All nine samples were analyzed for total petroleum hydrocarbons (TPHC) and base neutral compounds plus 15 library search compounds (BN+15). Samples E-3-4 with 32,000 ppm of TPHC, E-3-1 with 26,000 ppm of TPHC, and E-3-2 with 20,000 ppm of TPHC exceed the maximum allowable level of 10,000 ppm for total organic contaminants (TOC). Although numerous BN compounds were detected, none exceeded the most stringent Soil Cleanup Criteria.

Please note, the Department does not understand Dumont Borough's rationale for analyzing the samples for BN+15. Both the Closure Approval and Table 2-3 at N.J.A.C. 7:26E-2.1(d) require samples to be analyzed for VO+10 including calibration for total xylenes. Because the proper Site Investigation sampling was not completed when the diesel tank was removed, soil sampling is required to ensure that soil contamination does not exist. In accordance with N.J.A.C. 7:26E-6.3 and 6.4, and Table 2-3 at N.J.A.C. 7:26E-2.1(d), Dumont Borough shall resample locations E-3-4 and E-3-1 and analyze the samples for volatile organics using EPA Method 8240 calibrated for xylenes, with a library search (VO+10).

Dumont Borough shall delineate the horizontal and vertical extent of contamination previously detected in E-3-4, E-3-1, and E-3-2. Sampling shall begin at the location where contamination was previously detected and continue out in all directions, including vertically, until the complete horizontal and vertical extent of contamination is defined. Additional information on requirements for contaminant delineation may be found in N.J.A.C. 7:26E-4.1(b) and 6.4(a)5. Field screening may be utilized to bias sample locations to areas of greatest suspected contamination, but pursuant to N.J.A.C. 7:26E-2.1(b), may not be utilized to verify clean zones. The Department's most recent general guidance on soil contaminant cleanup criteria (April 1994 Site Remediation News) may also be utilized to evaluate when delineation is complete. If contamination is to be remediated during this phase of the investigation, Dumont Borough shall conduct the appropriate post-remedial sampling to confirm the effectiveness of the remedial effort.

If the excavation was enlarged horizontally beyond the immediate tank removal area, additional soil samples shall be taken pursuant to N.J.A.C. 7:26E-6.4(a)2i-iv.

Sample depths shall be determined pursuant to N.J.A.C. 7:26E-6.4. Field screening of the soil boring shall be conducted because the tank contained volatile organic compounds. Samples shall also be collected in the area of all former piping and dispensers in accordance with N.J.A.C. 7:26E-3. Locations should be biased towards potential discharge areas (joints, connections, etc.). All delineation samples shall be analyzed for total petroleum hydrocarbons (TPHC) using EPA Method 418.1 modified for soil with soil extraction methods 3540 or 3550. In addition, 25% of the delineation samples which exceed 1,000 parts per million (ppm) TPHC shall also be analyzed for volatile organics using EPA Method 8240 calibrated for xylenes, with a library search (VO+10); samples for the additional analysis shall be those with the highest TPHC concentration. If TPHC results are 1,000 ppm or less, the additional analysis is not required.

The former 250 gallon waste oil UST was closed (reportedly abandoned-in-place) prior to 1986, and therefore, not subject to the UST Law. Dumont Borough shall provide proof that the 250 gallon waste oil UST is properly abandoned-in-place (submit information that the tank has been rendered non-operational) and submit the date that this occurred. Because the UST was never reported to have discharged, the Department is not requiring an investigation at this time, but reserves the right under separate laws to require a Site investigation, if evidence surfaces that indicates a discharge occurred from the waste oil UST.

Area of Concern # 3 (AOC #3): Former 275 gallon waste oil UST (Tank E4) at the south side of the DPW maintenance building which was removed in January 1994 under the Authority of Closure Approval TMS # C93-3822.

Four soil samples (E-4-1 through E-4-4) were obtained at a four foot depth along the centerline of the UST excavation. All samples were analyzed for TPHC, VO+10, and Priority Pollutant Metals. Sample E-4-3 exhibited the highest TPHC result with 23,000 ppm. No VO+10 nor Metals results exceeded the most stringent Soil Cleanup Criteria.

The Department does not understand Dumont Borough's rationale for analyzing all the samples for VO+10 and Metals, and failing to analyze sample E-4-3 (highest TPHC result) for BN+15 and PCBs as required in Table 2-3 at N.J.A.C. 7:26E-2.1(d). Dumont Borough shall resample location E-4-3 for base neutral organics using EPA Method 8270 with a library search (BN+15) and polychlorinated biphenyls (PCBs) using SW-846 Method 8080 by GC using 3540 or 3550 extraction methods.

Dumont Borough shall delineate the horizontal and vertical extent of TPHC contamination previously detected in sample E-4-3. Sampling shall begin at the location where contamination was previously detected and continue out in all directions, including vertically, until the complete horizontal and vertical extent of contamination is defined. Additional information on requirements for contaminant delineation may be found in N.J.A.C. 7:26E-4.1(b) and 6.4(a)5. Field screening may be utilized to bias sample locations to areas of greatest suspected contamination, but pursuant to N.J.A.C. 7:26E-2.1(b), may not be utilized to verify clean zones. The Department's most recent general guidance on soil contaminant cleanup criteria (April 1994 Site Remediation News) may also be utilized to evaluate when delineation is complete. If contamination is to be remediated during this phase of the investigation, Dumont Borough shall conduct the appropriate post-remedial sampling to confirm the effectiveness of the remedial effort.

Dumont Borough shall analyze delineation soil samples for total petroleum hydrocarbons (TPHC) using EPA Method 418.1 modified for soils with extraction methods 3540 or 3550. In addition, 25% of the samples where TPHC was detected shall be analyzed for volatile organics using EPA Method 8240 calibrated for xylenes, with a library search (VO+10), base neutral organics using EPA Method 8270 with a library search (BN+15), polychlorinated biphenyls (PCBs) using SW-846 Method 8080 by GC using 3540 or 3550 extraction methods, and Priority Pollutant Metals; samples for the additional analysis shall be those with the highest TPHC concentration. If TPHC is not detected and there is no evidence of a discharge from the waste oil UST system, the additional analyses are not required.

All boring logs, including field screening results, shall also be provided. The field screening results shall be reported along with background readings and instrument calibration procedures.

Site and AOC Diagrams
Dumont Borough shall submit scaled, AOC diagrams indicating the exact location, orientation, and depth of all historic and current USTs, **product-bearing piping**, dispensers/pump islands in relation to the all soil borings (previous and future) and former excavation dimensions. The scaled, site diagram shall include the location of all AOCs and existing/future monitoring wells, subsurface conduits and utilities, existing structures, etc. Dumont Borough shall also submit a list of the contents and size of all former and current USTs and indicate such on the maps.

Backfill Documentation
Dumont Borough shall submit documentation certifying that the material used as backfill in all three Areas of Concern is free of contaminants and meets all requirements pursuant to N.J.A.C. 7:26E-6.4(b). Please note that the Department may require sampling of any backfill suspected to be contaminated.

Fate of Excavated Soils
Approximately 400 cubic yards of hydrocarbon affected soil were excavated during the removal of the above-referenced USTs. Dumont Borough shall inform the Department of the fate of the soil, and if removed from the site, submit copies of the necessary documentation (manifests, invoices, etc.).

BOROUGH OF DUMONT's PROPOSAL: Dumont Borough discusses the reasons for recommending "capping" the entire site with pavement, including: same use and ownership of site for foreseeable future; a Declaration of Environmental Restriction would not present a hardship to the Borough; most of the yard was resurfaced with asphaltic concrete two years ago; the remainder of the site can be paved to minimize direct contact; capping would minimize disruption of DPW activities, and capping would be most economical.

DEPARTMENT's RESPONSE: Although Dumont Borough has analyzed remediation strategies for the site, Dumont Borough shall submit an Effectiveness Analysis and Certification for the proposed remedial approach (see Section **IV. D. Effectiveness Analysis and Certification**). Please note, because ground water contamination has been caused by discharges from the USTs, Dumont Borough shall delineate the soil contamination and propose a remedial action for soils with levels of contamination exceeding the impact to Ground Water Soil Cleanup Criteria. Before a Declaration of Environmental Restriction can be instituted for the site, Dumont Borough is required to delineate the horizontal and vertical extent of all contamination and address all hazardous waste (e.g., the soils exhibiting TPHC at concentrations greater than 30,000 ppm).

II. Ground Water

The site consists of fill material overlying glacial sediments. Eleven monitoring wells (MW-3, MW-5 through MW-9, MW-11 through MW-13, MW-15, and MW-18) relate to ground water contamination. There is also one recover well (RW-1) and four piezometers (PZ-1 through PZ-4). In October 1994, depth to ground water ranged from 3.5 to 9.7 feet below grade. The ground water table contour map indicated that ground water flows in a northeasterly direction toward Hirshfeld Brook, which forms the eastern border of the site. Historically, free product has been present in MW-5 and MW-9. In October 1994, MW-5 exhibited 0.98 feet and MW-9 exhibited 0.29 feet of free product, respectively. Dissolved levels of ground water contaminants exceeding the Ground Water Quality Standards for the October 1994 sampling event are as follows: benzene at 1,300 ppb in RW-1, 760 ppb in MW-14, 610 ppb in MW-3, and 520 ppb in MW-12, and 20 ppb in MW-15; total xylenes at 1,900 ppb in MW-14, 1,600 ppb in RW-1, 620 ppb in MW-3, and 95 ppb in MW-13. Please note, the Department compares the library search tentatively identified compounds (TICs) to the standards for Synthetic Organic Chemicals (SOCs) found at N.J.A.C. 7:9-6 (Ground Water Quality Standards). As such, individual TICs will be compared to the interim generic criterion of 100 ppb for individual non-carcinogenic compounds. All TICs detected in a ground water sample will be compared to the 500 ppb total SOCs interim generic criterion. Therefore, exceedences of the GWQS for TICs were as follows: 6 compounds exceeded the 100 ppb criterion and total TICs at 1,656 ppb exceeded the total SOC criterion of 500 ppb in MW-3; 1 TIC exceeded the 100 ppb criterion and total TICs at 546 ppb exceeded the 500 ppb criterion in MW-12; 10 compounds exceeded the 100 ppb individual TIC criterion and total TICs at 3,036 ppb exceeded the 500 ppb criterion in MW-14; and 7 compounds exceeded the individual 100 ppb criterion and total TICs at 2,325 ppb exceeded the 500 ppb criterion in RW-1. The piezometers were not sampled.

Ground Water Site Investigation Requirements

The Dissolved BTEX Isoconcentration Map (Figure 5) of the RAW proposal indicates that no monitoring wells currently exist within 10 feet of any of the former UST excavations. Therefore, it is difficult to assess the ground water quality of the source areas. Because soil contamination exceeding the 10,000 ppm Total Organic Contaminant Criterion exists at AOC #2 and AOC #3, Dumont Borough shall install ground water monitoring wells within the excavations or 10 feet hydraulically downgradient of the former tank locations within 30 days. The Department reserves its right at N.J.A.C. 7:26E-4.4(d) to require installation of a source area ground water monitoring well at AOC #1 until the SI requirements have been completed.

Ground Water Delineation Requirements

The Dissolved BTEX Isoconcentration Map also indicates that the area of the site exhibiting the greatest ground water contamination exists from the southeast corner of the DPW maintenance building northeast to the Knights of Columbus building, which is significantly hydraulically downgradient of the former UST excavations. Dumont Borough shall install additional ground water monitoring wells to fully delineate the horizontal and vertical extent of ground water contamination at this area. Contamination shall be delineated to the Ground Water Quality Standards, N.J.A.C. 7:9-6, unless otherwise approved by the Department. At a minimum, ground water monitoring wells shall be installed hydraulically downgradient of MW-5 between the office building and Knights of Columbus building in order to delineate the free product plume. Dumont Borough shall also delineate free product by installing two additional monitoring wells east and northeast of MW-9. As 700 ppb of BTEX is present in MW-12, and is likely to increase with time due to the migration of the contaminant plume, Dumont Borough shall install an additional monitoring well hydraulically downgradient (northeast) of MW-12 to delineate the downgradient edge of the dissolved phase plume. If it is necessary to install wells off-site, Dumont Borough shall provide documentation of written requests seeking access to install said monitoring wells on off-site properties within thirty (30) calendar days of receipt of this correspondence. Please be advised that N.J.S.A. 58:10B, a statute concerning site remediation, provides a cause of action for persons to obtain access to properties not owned by that person for the purpose of conducting remedial activities at that site. Information on this provision of N.J.S.A. 58:10B is found in the "Guide for the Submission of Remedial Action Workplans", sent previously with the Department's June 12, 1995, letter regarding the Aladdin Park site.

Dumont Borough shall submit boring logs and the monitoring well construction details (Well Certification Forms A and B found in the "Guide for the Submission of Remedial Action Workplans") for all existing and required monitoring wells.

Interim Ground Water Sampling Requirements

Until a ground water RAW is approved, Dumont Borough shall annually sample every monitoring well, recovery well, and piezometer which does not contain free product and analyze the samples for volatile organics, methyl tertiary butyl ether (MTBE), and tertiary butyl alcohol (TBA) using EPA Method 624 calibrated for xylenes, with a library search (VO+10); and for lead using EPA Method 200.7 (ICAP) or EPA 239.2 (Graphite Furnace). The SW-846 equivalent for this procedure is ICAP 3010/6010, sample prep 3050/6010 Furnace 3020/7421 sample prep 3050/2421. The first annual sampling event shall occur within the next 60 days.

Dumont Borough shall sample the required ground water source area well at AOC #2 for base/neutral organics using EPA Method 625 with a library search (BN+15); and volatile organics using EPA Method 624 calibrated for xylenes, with a library search (VO+10). Sampling of the required source area well at AOC #2 shall occur within 60 days.

Dumont Borough shall sample the required ground water source area well at AOC #3 for Priority Pollutant plus 40 (PP+40), or EPA Target Compound List plus 30 and EPA Target Analyte List. Sampling of the required source area well at AOC #3 shall occur within 60 days.

Data Presentation

For each sampling event, Dumont Borough shall submit a table to include for each monitoring well: 1.) top of casing elevation; 2.) top of screen elevation; 3.) ground water elevation (corrected for free phase product if present); 4.) free phase product elevation (if present); and 5.) free phase product thickness (if present).

For each sampling event, Dumont Borough shall construct a scaled isopleth map of free product thickness where free product exists, and scaled isopleth maps for dissolved product concentrations. Dumont Borough shall submit the updated maps with each subsequent submittal.

Dumont Borough shall construct and submit scaled, ground water table contour maps for each ground water sampling event. A ground water contour map reporting form (see the Department's

March 1995 "Guide for the Submission of Remedial Action Workplans") shall accompany each ground water contour map submittal.

BOROUGH OF DUMONT's PROPOSAL: Dumont Borough proposes to utilize MW-3, MW-14, and RW-1 as source area wells; MW-12 as a compliance point; MW-12 and a new well to be installed northeast of MW-12 will act as sentinel wells; and MW-11 and MW-6 will be up gradient monitoring points. All wells would be sampled on a quarterly basis. Dissolved oxygen, organic matter content, nutrient levels, and hydrocarbon-utilizing microbial counts would be assessed during the initial sampling round to evaluate susceptibility of BTEX for natural biodegradation. The data would be used to develop a fate-and-transport model for BTEX over a 5-year period to assess appropriateness of sentinel well locations: Free product recovery will be initiated through passive skimming and natural attenuation of residual free phase hydrocarbon and dissolved phase hydrocarbon because of the apparent small volume of free phase hydrocarbon, low hydraulic conductivity, degradability of gasoline, and lack of downgradient drinking water supply receptors. Dumont Borough proposes delineating free product by collection of soil samples.

DEPARTMENT'S RESPONSE:

Remediation of Free Product: The Department has several concerns regarding the free product contaminant plume. Of greatest concern is the possibility that free product contamination will again enter Hirshfeld Brook on the eastern boundary of the site. The Department seeks to avoid a recurrence of discharges into the stream like those that initiated the case. The calculated ground water velocity of 17 feet/year in conjunction with the proximal location of free product indicates the stream is threatened. The Department agrees that Dumont Borough should immediately initiate free product recovery as required at N.J.A.C. 7:26E-1.11. Dumont Borough shall initiate free product recovery while continuing to delineate the free product plume.

Remediation of Dissolved Phase Plume: The Department is also very concerned with the possibility that dissolved phase gasoline also threatens Hirshfeld Brook. The data presented indicated that MW-12 is already impacted, and it is the nearest well to the stream (approximately 80 feet west). The Department will not approve a ground water RAW which allows dissolved phase levels of gasoline to violate the Surface Water Quality Standards (N.J.A.C. 7:9B). Once the additional delineation ground water wells have been installed and the samples tested as required above, then Dumont Borough shall reevaluate its ground water RAW proposal and resubmit a revised ground water RAW. Be advised that the Department cannot approve a Natural Remediation Compliance Program for the subject facility unless the downgradient extent of the dissolved phase contaminant plume is fully delineated and free product petroleum is removed. Please refer to the Department's March 1995 "Guide for the Submission of Remedial Action Workplans" for a complete discussion of the requirements.

Ground Water Treatment Feasibility Study

Regarding MW-5 and MW-9, Dumont Borough shall consider conducting a well-performance test prior to a pump test to determine the maximum yield and maximum draw down of the well, the most appropriate equipment to be used for the pump test, the best method to measure the yield, volume of water and amount of draw down occurring at given pumping rates.

Dumont Borough shall develop the following information through implementation of the pump test: specific yield, range of transmissivity values, approximate aquifer thickness, storativity, hydraulic head, hydraulic gradient, ground water velocity, the extent of the cone of depression and the extent of the zone of capture.

In order to facilitate the timely implementation of a ground water treatment feasibility study, within 14 calendar days of receipt of this letter, Dumont Borough shall obtain applications for the permits necessary to conduct the study.

Establishment of Ground Water Classification Exception Area / Water Restriction Area
Classification Exception Areas (CEAs) pursuant to the Ground Water Quality Standards (N.J.A.C. 7:9-6, et seq.) apply to all site remediation cases involving ground water contamination above applicable standards. A designated CEA shall also act as a Well Restriction Area pursuant to N.J.A.C. 7:9-6.6(d).

As a result of the ground water contamination at this site, a CEA shall be established at the time of RAW or No Further Action (NFA) approval, as applicable. The proposed RAW or NFA shall include, and will not be approved without, the following:

1) latitude and longitude with an accuracy to 1/10 of a second, and lot and blocks of impacted properties;
   NOTE: Site boundaries can define the CEA if no off site contamination is expected to occur for the duration of the CEA;
2) list of affected aquifers;
3) list of contaminants of concern;
4) estimated longevity of the CEA, based upon the most mobile and persistent compounds to meet the GWQS. (As appropriate, existing monitoring data shall be used to verify models.) For cases involving active remediation, the longevity of the CEA may be indeterminate but not permanent;
   Note: For further discussion, consult the CEA Guidance Document sent in conjunction with the Department's June 12, 1995, letter regarding the Aladdin Park case.
5) the mapped boundaries of the CEA on a USGS 7.5 minute quadrangle map;
6) FOR GROUND WATER USE AREAS*: The CEA shall be presented in Geographic Information System (GIS) Format (contained in the CEA Guidance Document). For more information on the GIS, you can obtain the NJDEP "GIS - Mapping the Present to Protect New Jersey's Future - Mapping and Digital Data Standards" available from: NJDEP, Bureau of Revenue, CN 417, Trenton NJ 08625);
7) FOR GROUND WATER USE AREAS: Impacted property owners and local officials (mayor, planning board and health department) must be notified by certified mail. The notice shall inform them of the CEA and ground water use restriction (discuss with case manager before defining) prior to submittal of the proposed RAW or NFA and solicit comments to be submitted to the Department's case manager. The RAW or NFA will not be approved without proof and copies of notification. The Department suggests that contact be made with your case manager to discuss the boundaries of the CEA prior to public notification.

   NOTE: If a RAW will be proposed for ground water remediation that does not currently include the full extent of the plume, the CEA can be proposed for that portion being remediated. The CEA boundaries and longevity can be adjusted over time.

   ***Ground Water Use Areas** shall be defined as those locations with current or future ground water use (potable, industrial, agricultural, etc.). Current ground water use shall be based on the Department's Bureau of Water Allocation files, consulting the New Jersey Water Supply Master Plan (copies are available from the Office of Environmental Planning), contacting the local or regional water purveyor, and, as necessary, conducting a door-to-door canvass. Future ground water use (over a 25-year planning horizon) can be determined from local or regional water purveyors, local or county planning boards and boards of health, and the New Jersey water Supply Master Plan.

III. Receptor Evaluation

A. Well Searches

Dumont Borough has conducted the required Department well searches to identify all irrigation, monitoring, and domestic wells located within a one-half mile radius of the site and all industrial, public supply wells, and wells with water allocation permits located within a one mile radius of

the site; and plotted the locations on a scaled site map. Three wells were identified, two approximately 1,500 feet northeast of the site and the third approximately 2,500 feet northwest of the site. All three wells are located on the opposite side of Hirshfeld Brook and are not likely to be threatened by the DPW discharges.

However, as ground water contamination has been identified and ground water is used for potable purposes in the vicinity of this site, it will be necessary to canvass the neighborhood to locate all nearby permitted and unpermitted wells. Canvassing shall be conducted within 1,000 feet of the known downgradient edge of contamination, and within the estimated plume of contamination. Dumont Borough shall plot the locations of all wells identified in the well search and canvassing on a reduction of a topographic or geoquadrangle map.

Dumont Borough shall also sample the nearest down gradient potable well(s) which are within 1,000 feet of the known down gradient edge of the potential path(s) of the contamination and analyze the samples using **EPA Method 524.2** (include targeted analyses for MTBE and TBA). The results shall be submitted within the time frame specified within this letter and shall be accompanied by the Quality Assurance/Quality Control deliverables prepared per the **"Full Laboratory Data Deliverables"** format. If contamination is found, the Department and the local health official **must** be notified immediately.

B. **Utility and Subsurface Structure Evaluation**
Dumont Borough has identified the location and depth of on- and off site utilities and conduits. Dumont Borough shall evaluate the possible interconnection of ground water to the subsurface utilities identified. Dumont Borough shall also determine the diameter and construction specifications of the subsurface utilities in order to determine whether any utility may be acting as a conduit for ground water migration, either along the bedding plane or within the structure itself Dumont Borough shall also determine whether the subsurface utility may be acting as a barrier for ground water migration since the depth to ground water at the site is shallow.

Based upon the levels of ground water contamination present and the proximity of a subsurface water line, storm sewer, natural gas line, and telephone and electric utilities hydraulically downgradient of AOC #2, Dumont Borough shall evaluate the aforementioned utilities on a semi-annual basis beginning July 1995. Dumont Borough shall canvass the immediate area to locate all basements and determine the presence/absence of gasoline vapors in accordance with N.J.A.C. 7:26E-4.4(h)4. Dumont Borough shall plot the include the exact locations of all subsurface utilities and basements on the **scaled** ground water maps. If gasoline vapors are detected in any subsurface utilities or basements, Dumont Borough shall conduct air monitoring to determine the levels and hazards present in accordance with N.J.A.C. 7:26E-4.4(i). If it is confirmed that the source of the vapors is emanating from the Dumont Borough site, Dumont Borough shall take immediate action to abate and remediate the source.

Because the storm sewer has in the past been affected by the on-site discharges and due to the free product currently located in near proximity to the storm sewer, Dumont Borough shall inspect the storm sewer on a semi-annual basis beginning July 1995 for oxygen levels, lower explosive levels (LEL), and the presence of organic vapors. This may be completed through visual inspection and use of field screening instruments.

C. **Surface Water Evaluation**
Dumont Borough shall evaluate whether the storm sewer that traverses the site from west to east, and Hirshfeld Brook which is located on the eastern property boundary of the site and 80 feet from the free product contaminant plume, will be affected by the discharge. Sampling of the storm sewer water shall be conducted on at least a semi-annual basis beginning July 1995 at the outflow into Hirshfeld Brook. Hirshfeld Brook shall also be tested on a semi-annual basis in either the west bank sediment or directly from the stream water as required pursuant to N.J.A.C. 7:26-

3.8 and 4.5. The location where sampling shall occur is the portion of the stream closest to the downgradient edge of the contaminant plume.

IV. Quality Assurance

A. All data submitted shall conform to the "Technical Requirements for Site Remediation," N.J.A.C. 7:26E, except where specifically indicated.

B. In accordance with the "Technical Requirements for Site Remediation," specifically N.J.A.C. 7:26E-3.10(b)3, a technical overview is required for any report submission. As part of that overview, a discussion regarding the reliability of the laboratory analytical data, shall be included. Please see Appendix 2 of the March 1995 "Guide for the Submission of Remedial Action Workplans".

C. Dumont Borough shall legibly complete all chain-of-custody forms, and list all methods of preservation including refrigeration (eg. "Ice") directly on the chain-of-custody form. Dumont Borough shall maintain all samples at the target temperature of 4°C from the time the sample is obtained until the samples are released to the New Jersey Certified Laboratory.

Dumont Borough shall submit the complete Laboratory Deliverables package (Quality Assurance/Quality Control information) with respect to the soil samples obtained for the site investigation related to the removals of the 3,000 gallon gasoline UST at AOC #1, the 2,000 gallon diesel UST at AOC #2, and the 275 gallon waste oil UST at AOC #3.

V. Other

A. **Certification Requirements**
It is important to note that effective April 25, 1992, all persons performing tank services must be certified per N.J.S.A. 58:10A-24.1-8. **All work related to any tank service must now be conducted by, or under the on-site immediate supervision of an individual certified in the activity being conducted.** All documents (permit applications, reports, proposals submitted to BUST must be prepared and signed by a certified individual.

B. **Field Activity Notification**
Dumont Borough shall notify the assigned BUST case manager at least 14 calendar days prior to implementation of field activities. If Dumont Borough fails to initiate sampling within 30 calendar days of the receipt of this letter, any requests for an extension of the required time frames may be denied.

C. **Effectiveness Analysis and Certification**
Dumont Borough shall submit an Effectiveness Analysis and Certification. This submission shall include an analysis and certification that the proposed remedial actions for both soil and ground water meet the criteria contained in Section 35 (g) of P.L. 1993, c.139, including an analysis of long and short term effectiveness, implementability, timeliness, cost differential of permanent and nonpermanent remedies (if applicable), and community concerns. Please note that the Effectiveness Analysis and Certification supersedes the Remedial Alternative Analysis in N.J.A.C. 7:26E-5.

D. **Cost Recovery**
On April 5, 1993, the UST Fee Rule (Amendments and New Rules at N.J.A.C. 7:14B) was proposed. This rule appeared in the February 22, 1994, New Jersey Register. Effective February 22, 1994, the Department will be billing you for the Department's oversight of all work conducted at your site. Documents submitted in accordance with the "Technical Requirements for Site

Remediation" (N.J.A.C. 7:26E) will help reduce the time necessary for the oversight of the above referenced site. At this time, the Department intends to process bills on a semi-annual basis. Please consult the April 5, 1993, and February 22, 1994, State Registers for details. Copies can be obtained by contacting the Office of Administrative Law at (609) 588-6500.

VI. Administrative Requirements

Based upon the above requirements and the data generated to date, Dumont Borough is required to submit a Revised RAW in accordance with N.J.A.C. 7:26E-6.2 and P.L. 1993, c.139 (S-1070). This document shall be submitted to this Bureau at the above address, within **ninety (90** days upon receipt of this letter. The Revised RAW shall detail all activities conducted to achieve compliance with the requirements listed in this letter. Additionally, the Revised RAW shall present a comprehensive remedial proposal for all soil and ground water contamination present. Guidance regarding the minimum requirements and presentation format for this document are provided in the March 1995 "Guide for the Submission of Remedial Action Workplans."

It should be noted that if Dumont Borough completes the above requirements, and the data indicate that the remedial investigation has not been completed (i.e., contamination not completely delineated, Dumont Borough shall submit a RIW in accordance with N.J.A.C. 7:26E-4.8 within the specified time frame. The RIW shall include a schedule of implementation of the remaining remedial investigation required and the submittal date of the Revised RAW. Dumont Borough also has the option of completing the remaining remedial investigation in accordance with N.J.A.C. 7:26E-4, followed by the submission of the RIR/Revised RAW. If the latter option is selected, Dumont Borough shall notify the case manager listed below, in writing, within two weeks prior to the specified time frame referenced above. This notification shall include a generic discussion of activities conducted to date and activities to be conducted, as well as a detailed schedule of implementation which includes the submission of the RIR/Revised RAW.

Please note, pursuant to N.J.S.A. 58:10A-21 et seq. and N.J.A.C. 7:14B et seq., the owner and operator of the regulated underground storage tanks are strictly liable for compliance with these requirements. In addition, all state regulated USTs, except for heating oil USTs for on-site consumption, are regulated under 40 CFR Part 280. Non-compliance with these federal and state regulations exposes the tank owner and operator to the penalty and liability specified in 40 CFR Part 280, N.J.S.A. 58:10A-21 et seq. and N.J.A.C. 7:14B et seq.

If you should have any questions regarding this matter, please contact John Ruhl, Senior Geologist and case manager, of the Bureau of Underground Storage Tanks at (609)292-8761.

Sincerely,

Lee Hendricks, Unit Supervisor
Bureau of Underground Storage Tanks

c: Steven Tiffinger, Bergen County Department of Health Services, 327 East Ridgewood Avenue, Paramus, NJ 07652-4895
Joseph A. Ferreiro, Esq., 58-60 Main Street, P.O. Box 157, Hackensack, NJ 07602
Gregory Albright, Harding Lawson Associates, Metropolitan Executive Towers, One Meadowlands Plaza, Suite 1090, East Rutherford, NJ 07073

Harding Lawson Associates

June 18, 1996

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Joseph A. Pojanowski, III, Esq.
Dumont Borough Attorney
Pojanowski, Iskra & Trawinski
1439 Broad Street
Clifton, New Jersey 07013

Certified Mail
Return Receipt Requested

Honorable Donald Winant
Mayor of Dumont Borough
50 Washington Avenue
Dumont, New Jersey 07628

Response to Borough Attorney's Letter Dated May 9, 1996
and Payment Demand
Department of Public Works Site Cleanup
Borough of Dumont, New Jersey

Gentlemen:

Harding Lawson Associates (HLA) has prepared this letter to respond to the statements made in the Dumont Borough Attorney's (Joseph Pojanowski) letter to HLA dated May 9, 1996, and to demand payment for all outstanding monies owed to HLA for approved and completed work on the Department of Public Works (DPW) cleanup project. Past-due billings amount to $37,812.74 (including $6,536.67 in interest charges).

HLA Response

The first point raised in Mr. Pojanowski's letter is that HLA may not have acted in the best interest of the Borough of Dumont (the Borough) and did not perform in an acceptably professional manner concerning the referenced DPW project. These allegations are false. HLA believes it is significant that the Borough made no criticisms of HLA's work until HLA pressed for payment of past due fees. HLA has the following response:

- HLA provided appropriate scopes of work, which were reviewed by Mr. Joseph Ferriero, Esq. (Attorney for the Borough of Dumont on this project for work up until January 1996), by Mr. Marvin Katz (Borough Administrator through the duration of the project until Fall, 1995), and Mr. John Foster of Boswell McClave Engineering (acting as the Borough Engineer). All scopes of work and budgets were approved in writing in advance of the work being conducted by the Borough of Dumont's duly authorized representatives.

- Most work performed was conducted under the supervision of and at the written request of Mr. Ferriero. Work after January 1996 was requested by Mr. Pojanowski and the Borough Council in meetings in the Borough offices on November 21, 1995 and February 12, 1996. This work was

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conducted by HLA in good faith and to acceptable standards of practice. All work was submitted to NJDEP and was accepted by them.

- All work was performed in accordance with New Jersey regulations and with prevailing standards of professional environmental practice in New Jersey at the time the work was conducted.

The second point raised in Mr. Pojanowski's letter is that HLA "betrayed" the Borough through a lack of professionalism in handling the case. Specifically, the letter charges that HLA did not inform the Borough of possible cleanup funding sources from New Jersey and the Federal Government (the U.S. Army). While such advice regarding statutory alternatives is typically proved by legal counsel, HLA has the following response:

- At the time of HLA's initial involvement in the project (September, 1990), the primary cleanup funding mechanism for innocent (emphasis added) landowners was the New Jersey Spill Compensation Fund for which eligibility is determined pursuant to N.J.S.A 58:10-23.11 et. seq. Because the initial investigation at the DPW site was focused on leaking underground storage tanks (USTs) installed and owned by the Borough, this fund probably did not apply. Another funding program based on the Hazardous Discharge Site Remediation Fund (P.L., 1993, c. 139, sections 26 through 34) was available through Capital Alternatives Corporation in 1994. HLA's understanding was that this potential source of funds was being pursued by, and was the responsibility of, Mr. Ferriero (letter to HLA dated August 8, 1994). It is not known to us if this funding source was pursued more fully and, if not, why not. HLA was not a participant in this legal aspect of the project.

- HLA was never contracted to conduct an ASTM-style Phase I property assessment, nor (to our knowledge) was this ever discussed. HLA's historical information regarding the DPW site's former history was provided by the Borough through past and present council members and DPW employees. The first mention in the presence of HLA of a possible historical U.S. Army presence at the DPW site was made by a Borough Council member during the November 21, 1995 meeting. Although HLA was verbally asked to begin looking into this matter during the November 21, 1995 and February 12, 1996 meetings, HLA made it clear that the past-due charges (approaching 360 days overdue) would have to be paid before HLA would undertake significant further activities on the project (At the November 21, 1995 meeting with the Borough Council, the mayor assured HLA that a resolution would be passed at the January 1996 council meeting that would fund payment of the past-due charges). HLA was never authorized in writing to pursue this avenue of investigation. Neither was HLA a party to further discussions regarding this matter.

- As you should recall, the Borough was made aware that through various reports by HLA and a letter from Mr. Ferriero, that based on site data acquired through January 15, 1995 (HLA, 1995a; HLA, 1995b; Ferriero, 1991) the weight of the evidence strongly suggests contamination of soil and groundwater has resulted from leakage from the Borough's own USTs. This fact was acknowledged by Borough Council members and their legal counsel in both the November 21, 1995 and February 12, 1996 meetings. The presence of the former Twinboro Sewage Treatment Plant at the site probably has resulted in additional contamination in soils and groundwater related to base/neutral extractable organic compounds (HLA, 1990, 1991, and 1992). The Borough will need evidence to overcome the weight of these facts in order to allocate responsibility to other parties.

- HLA provides environmental and engineering services to clients. HLA does not provide legal opinions or advice on any matters.

Overdue Invoices

There are presently four outstanding invoices:

- No. 133256, dated January 5, 1995 for $19,781.57 (plus $4,691.78 in interest charges)
- No. 134402, dated January 29, 1995 for $7,824.15 (plus $1,763.13 in interest charges)
- No. 149878, dated February 28, 1996 for $2,567.28 (plus $73.49 in interest charges)
- No. 151828, dated April 24, 1996 for $1,103.07 (plus $3.26 in interest charges)

Copies of the invoices are attached. HLA expects payment of these invoices within 30 days. Please call Mr. Kenneth Strong, Esq., at (415) 892-1696 to discuss payment of your delinquent account.

Very truly yours,

HARDING LAWSON ASSOCIATES

Gregory R. Albright, R.G.
Senior Geologist

Edward A. Nemecek, R.G., CPG
Principal Hydrogeologist

GRA/EAN/KFS\ml

Enclosures: Invoice numbers 133256, 134402, 149878, and 151828

cc: William Thayer, HLA
Bharat Patel, HLA
Kenneth F. Strong, Palmer, Jones, Hawkins & Strong

State of New Jersey
Department of Environmental Protection

Christine Todd Whitman
Governor

Robert C. Shinn, Jr.
Commissioner

IN THE MATTER OF	:	
THE 1 ALADDIN AVENUE SITE	:	MEMORANDUM
AND	:	OF
THE BOROUGH OF DUMONT	:	AGREEMENT

This Memorandum of Agreement is entered into pursuant to the authority vested in the Commissioner of the New Jersey Department of Environmental Protection (hereinafter "the Department" or "NJDEP") by N.J.S.A. 13:1D-1 et seq. and N.J.S.A. 58:10B et seq. and the Water Pollution Control Act, N.J.S.A. 58:10A-1 et seq., the Solid Waste Management Act, N.J.S.A. 13:1E-1 et seq. and the Spill Compensation and Control Act, N.J.S.A. 58:10-23.11 et seq. and duly delegated to the Section Chief, Division of Responsible Party Site Remediation, Case Assignment Section pursuant to N.J.S.A. 13:1B-4.

FINDINGS

1. The property that is the subject of this Memorandum of Agreement is owned by the Borough of Dumont, and is located at 1 Aladdin Avenue, and is designated as Block 1105, Lots 17 and 22 on the tax maps of the Borough of Dumont, Bergen County, New Jersey (hereinafter the "Site").

2. The Borough of Dumont, with principal offices at 50 Washington Avenue, the Borough of Dumont, New Jersey, is the party executing this Memorandum of Agreement.

3. The intent of this Memorandum of Agreement is to allow the Borough of Dumont to conduct any of the remedial activities outlined herein with oversight from the Department. The Borough of Dumont has indicated to the Department, that it wishes to conduct the following activities at the Site with the Department's oversight:

a. Preliminary Assessment
b. Site Investigation
c. Remedial Investigation
d. Remedial Action

4. By entering into this Memorandum of Agreement, the Borough of Dumont does not admit to any fact, fault or liability under any statute or regulation for conditions which existed before, during, or after the Borough of Dumont's execution of this Memorandum of Agreement nor shall it be construed as a waiver of any right or defense the Borough of Dumont may have with regard to the Site.

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AGREEMENT

I. Remediation

5. The Borough of Dumont agrees to submit the following documents and the Department agrees to review and comment on documents submitted.

a. Preliminary Assessment Report
b. Site Investigation Report
c. Remedial Investigation Workplan
d. Remedial Investigation Report
e. Remedial Action Workplan
f. Remedial Action Report

6. Within thirty (30) calendar days after the Department's receipt of any submission pursuant to this Memorandum of Agreement, the Department will inform the Borough of Dumont in writing of any administrative deficiencies in the submission, pursuant to N.J.A.C. 7:26E, that will prevent the Department from conducting its review. When the Department determines that the submission is administratively complete, the Department will notify the Borough of Dumont in writing of the timeframe required for the Department to complete the review. This review will include a determination by the Department whether or not all remedial activities have been carried out consistent with applicable rules, standards, and guidelines.

7. Within seven (7) calendar days after the effective date of this Memorandum of Agreement, the Borough of Dumont will submit to the Department: a) the name, address and telephone number of the individual who will be the contact for the Borough of Dumont regarding technical matters concerning this Memorandum of Agreement and b) the name and address of the designated agent for the Borough of Dumont for the purpose of service for all matters concerning this Memorandum of Agreement.

8. The Borough of Dumont may terminate this Memorandum of Agreement if the Borough of Dumont determines that it is no longer feasible or desirable to continue with this Memorandum of Agreement, when the Borough of Dumont:

a. Submits full payment to the Department for any Department oversight costs the Department incurred pursuant to this Memorandum of Agreement which the Borough of Dumont has not paid;

b. Notifies the Department in writing of its intentions to terminate this Memorandum of Agreement;

c. Submits all data generated pursuant to this Memorandum of Agreement; and

d. Ensures that no environmental hazards exist at the Site as a result of the Borough of Dumont's actions pursuant to this Memorandum of Agreement.

e. The Department will cease review of any submittals under this memorandum of agreement on the date it receives the notice of intent to terminate described in Paragraph 8 (b) above; and no oversight costs will accrue after the Department has determined that the signatory is in full compliance with Paragraph 8. The Department will then prepare a summary of its costs and provide it to the Borough of Dumont. The date of termination of this agreement is the date of the Department's receipt of both the full unconditioned payment of all of the Department's oversight costs and all data required by Paragraph 8.c. above.

II. Project Coordination

9. Unless otherwise directed by the Department, the Borough of Dumont shall submit two (2) copies of all documents required by this Memorandum of Agreement to the person identified below, who shall be the Department's contact for the Borough of Dumont for all matters concerning this Memorandum of Agreement.

New Jersey Department of Environmental Protection
Division of Responsible Party Site Remediation
Bureau of Field Operations - Northern
2 Babcock Place
West Orange, New Jersey 07052

Attention: Yacoub Yacoub, Section Chief

III. Financial Obligations

10. Upon receipt of a summary of the Department's costs incurred in connection with its oversight functions of this Memorandum of Agreement, the Borough of Dumont shall submit to the Department a cashier's or certified check payable to the "Treasurer, State of New Jersey" with NJDEP Form 062A for the full amount of the Department's oversight costs. The Borough of Dumont cannot be released from its obligations under this Memorandum of Agreement, until all oversight costs, for work performed by the Department, are paid.

11. Beginning three hundred sixty-five (365) calendar days after the effective date of this Memorandum of Agreement, and annually thereafter on that same calendar day, the Borough of Dumont shall submit to the Department a detailed summary of all monies spent to date pursuant to this Memorandum of Agreement, the estimated cost of all future expenditures associated with this Memorandum of Agreement (including any operation and maintenance costs), and the reason for any changes from the previous cost review the Borough of Dumont submitted.

IV. Reservation of Rights

12. The Department reserves the right to unilaterally terminate this Memorandum of Agreement in the event that the Borough of Dumont violates any terms or fails to meet the obligations of this Memorandum of Agreement or in the event that the Site becomes a high priority for the Department.

13. Nothing herein, including any document the Department issues as agreed to above, shall be interpreted to constitute a release or waiver of liability for any of the conditions which existed before, during or after the Department's execution of this Memorandum of Agreement.

V. General Conditions

14. The Borough of Dumont shall, in addition to any other obligation required by law, notify the Department contact immediately upon knowledge of any condition posing an immediate threat to human health and/or the environment.

15. The Borough of Dumont shall perform all work conducted pursuant to this Memorandum of Agreement in accordance with N.J.A.C. 7:26E and prevailing professional standards then prevailing.

16. The Borough of Dumont shall conform all actions required by this Memorandum of Agreement with all applicable federal, State and local laws and regulations.

17. Nothing in this Memorandum of Agreement shall be deemed to impose on the Borough of Dumont any additional liabilities or obligations, other than those specifically stated herein. Nothing shall relieve the Borough of Dumont from complying with all other applicable laws and regulations.

18. The Borough of Dumont shall preserve all potential evidentiary documentation found at the Site, which may provide a nexus between the contaminated site and any responsible party or lead to the discovery of other areas of concern including without limitation, documents, labels, drums, bottles, boxes or other containers, and/or other physical materials that could lead to the establishment of the identity of any person which generated, treated, transported, stored or disposed of contaminants at the Site, until written approval is received from the Department to do otherwise.

19. Upon receipt of a written request from the Department, the Borough of Dumont shall submit to the Department all data and information concerning contamination at the Site, including technical records and contractual documents, and raw sampling and monitoring data, whether or not such data and information was developed pursuant to this Memorandum of Agreement.

If the Borough of Dumont believes any such data or information is protected by a privilege it will retain the data and information and notify the Department of the nature of the document and the privilege claimed. The Borough of Dumont may request that the Department keep confidential information contained in a submission to the Department pursuant to N.J.A.C. 7:14A-11.

20. The Department will issue a no further action statement when the Department has determined that the signatory has conducted the agreed upon remedial activities pursuant to this Memorandum of Agreement and the remedial activities are in accordance with all Department requirements.

21. This Memorandum of Agreement shall be governed and interpreted under the laws of the State of New Jersey.

22. This Memorandum of Agreement shall be binding, jointly and severally, on each party, its successors and assignees subject to the right of termination above. No change in the ownership or corporate or business status of any party, or of the facility or Site shall alter any signatories's responsibilities under this Memorandum of Agreement.

23. This Memorandum of Agreement shall become effective upon execution hereof by all parties.

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION

Date: 1/8/97 BY: Mark J. Pedersen
Mark J. Pedersen, Section Chief
DRPSR, Case Assignment Section

The Borough of Dumont

Date: 12-26-96 BY: Donald Dumont
Signature

Donald Dumont
Print Full Name Signed Above

MAYOR
Title